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**PRINCIPAL-PRINCIPAL CONFLICTS IN  
ASEAN 5 MERGERS AND ACQUISITIONS**

A thesis  
submitted in fulfilment  
of the requirements for the degree  
of  
**Doctor of Philosophy**  
at  
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by  
**AZILAWATI BANCHIT**



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## **ABSTRACT**

The thesis investigates principal-principal (PP) conflicts arising in mergers and acquisitions (M&A) in Asean 5 countries; Indonesia, Malaysia, the Philippines, Thailand and Singapore. This thesis is the first study adapting the well-established Lintner dividend model (Lintner, 1956) to examine the potential use of the model as measurement of PP conflicts in Southeast Asian market study where availability of continuous long-term data are usually lacking. The issue is of importance to investors and for the growth of equity markets in Asean countries in Southeast Asia and probably well beyond.

According to prior research, large controlling shareholders in Asian public listed companies do cause agency conflicts (Becht, Franks, Mayer, & Rossi, 2010; Burkart & Lee, 2008; Claessens, Djankov, Fan, & Lang, 2002). However, the net effect cannot be estimated with any degree of accuracy without understanding and being able to distinguish the single effect of an investment project. The relationship between large shareholders and agency conflicts is difficult to test empirically since no public information is provided at the individual investment project level, which differs from cases of corporate mergers and acquisitions (M&A) (Amihud, Lev, & Travlos, 1990). This thesis is novel in that it reduces this gap by extending a recently developed framework of PP conflicts by investigating the impact of large controlling shareholders in M&A in Asean 5 countries; Indonesia, Malaysia, Philippines, Singapore and Thailand.

Four main components make up for the contributions that can be drawn from this thesis. First, the issue of PP conflicts, argued by Young, Peng, Ahlstrom, Bruton

and Jiang (2008) as a major and especially prevalent concern in emerging markets. Broadly, PP conflicts refer to conflicts between controlling shareholders and minority shareholders in a corporation (Dharwadkar, George, & Brandes, 2000) and include an element of expropriation of profit. The second component is where M&A provides situations in which PP conflicts may be worsen. It is noted that M&A activities in Asean 5 are highly significant. Thirdly, this research is the first direct study of PP agency conflicts, ownership and financial variables for Asean 5 public listed companies. Finally, the fourth component is that the study includes elements of time-invariant (including rarely changing variables) and time-variant variables in the panel data model analysis which provide additional confirmation of the veracity of the modelling and robustness of analysis. Compared to prior studies undertaken elsewhere, the sophistication and robustness of the micro-econometric analysis used in the research is a significant enhancement.

Data needed to test various hypotheses are sourced from the SDC M&A Database, SDC Ownership database and Thomson One Banker Database. Further data have been collected from companies listed in the individual stock exchange markets of the five countries. The task was not straightforward and while appropriate to recognise efforts by various databases to collect and compile helpful sources, there remains much more work to be done in terms of manual collection of data from published annual reports. This exercise leads to the final sample which comprises of 1,013 deals (807 acquiring companies) from years 2000 to 2008 in various industries.

Statistical and data issues, such as controlling for endogeneity effects, and treatment of time-invariant and time-variant data in the models, are systematically addressed. The diagnostic testing opens up the potential for the analysis to utilise Hausman-Taylor (HT) and fixed-effects vector decomposition (FEVD) techniques. The current research extends the econometric robustness of analysis using Tobit regression.

PP conflicts associated with M&A are found to be rampant. Furthermore, PA conflicts are also significant in this region. These suggest consequences in terms of limited willingness by investors to participate in share investment as part of individuals' portfolios strategy. Similarly, challenges by regulators in each capital market to promote the secondary market are addressed in this thesis by advocating the use of dividend ratio policies as an indicator for PP conflicts.

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# CHAPTER 1: INTRODUCING THE STUDY

## 1.1 Background of the study

The core of the problem in Asian agency conflicts is how to protect the minority shareholders from the expropriation of controlling owners (Mitton, 2002; Nam, 2001). However, evidence of the alleged expropriation from controlling shareholders remains inconclusive because it is only anecdotal evidence that is available<sup>1</sup>. The relationship between large shareholders<sup>2</sup> and agency conflicts is difficult to be tested empirically since no public information is provided for individual investment projects, unlike cases of corporate mergers and acquisitions (Amihud, et al., 1990).

As opposed to employing the well-established agency theorem of principal-agent (PA) conflicts, this study looks at the less popular and relatively new principal-principal (PP) conflicts. It is contended that the agency problem in a concentrated ownership environment is not necessarily between PA but rather it is among the principals or shareholders themselves (large and minority shareholders), known as PP conflicts (Dharwadkar, George, & Brandes, 2000; Young, Peng, Ahlstrom, Bruton, & Jiang, 2008). This thesis is the first study adapting the well-established Lintner dividend model (Lintner, 1956) to examine the potential use of the model as a PP conflicts measurement in an Asian market study. It is also of importance

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<sup>1</sup> For instance in November 1997, United Engineers Malaysia (UEM) a conglomerate in Malaysia acquired 32.6% of its financially troubled parent, Renong at an inflated price that cause the minority shareholders to infer UEM's action as a bailout at their expense. UEM share price fell by 38% the day the transaction was announced (Lopez, 2000).

<sup>2</sup> The terms large shareholder and concentrated ownership are used interchangeably (Banchit & Locke 2011, Song 2007)

in general aspects of emerging market companies, and may be the key direction for extensions in future research. (Bhaumik & Selarka).

Finance and economic fraternities are familiar with the sound and established agency theorem called principal-agent (PA) conflicts where management (agent) undertaking M&A activities are viewed to serve their self-interests as opposed to increasing shareholders' (principal) wealth. Public companies in the United States and United Kingdom are characterised by ownership dispersion. Reasons for conflicts of interest among the management (agent) and shareholders (principal) include diversifying their (the agents') employment risk, entrenchment opportunity (Himmelberg, Hubbard, & Palia, 1999) and increasing their prestige and remuneration with the increased size of the company (Andrade, Mitchell, & Stafford, 2001; Erickson & Wang, 1999; Jensen & Ruback, 1983; Shleifer & Vishny, 1997). In addition, scholars point out that, "some of the cleverest evidence on agency problems...comes from acquisition announcements" (Shleifer & Vishny, 1997, pp. 746-747).

It is generally known that large or controlling shareholders in dispersed ownership settings are in a position to effectively monitor agents on behalf of other non-monitoring or minority shareholders. The notion is that management and large shareholders work cooperatively in a model where information asymmetries are reduced between PA to efficiently reduce agency costs and increase company value. (Chidambaran & John, 1998; Demsetz, 1983; Shleifer & Vishny, 1986; Shleifer & Vishny, 1997).

And unlike public companies in the United States and United Kingdom, most public companies in the rest of the world such as Western Europe and Southeast Asia demonstrate a different ownership structure where agency conflicts between PA are supposedly minimised. It is documented that up to 50% of publicly traded Western European companies (Faccio, Lang, & Young 2001b) and up to 70% of public listed companies in Southeast Asia (Claessens, Djankov, & Lang 1999a) are affiliated with a business group, for which a controlling shareholder often uses pyramids or cross-holdings to control a large group of companies. These companies are controlled by large shareholders themselves; in the hand(s) of individuals, family members, governments or industrial groups (Claessens, Djankov, & Lang, 2000b; Faccio & Lang, 2002; La Porta, Lopez-de-Silanes, & Shleifer, 1999; Lins, 2003).

It is often found that controlling shareholders hold some managerial ties that enable their involvement with management (Maury & Pajuste, 2002). This influence by large shareholders is one of the main reasons why many Asian corporations failed, due to investing in risky projects and weak performance that ultimately contributed to the disastrous financial crisis in 1997 (Claessens, Djankov, & Lang, 1999a; Dhnadirek & Tang, 2003; Lemmon & Lins, 2003).

Shleifer and Vishny (1986) argue that as ownership by large shareholders rises, the M&A activities are more likely to occur. Large controlling shareholders may utilise the strategy to expropriate value from the minority shareholders, especially in countries with low investor protection (Bae, Kang, & Kim, 2002; Bigelli & Mengoli, 2004; Guan, 2005). The divergence of interest between large

shareholders and minority shareholders allows the former to extract private benefits by making suboptimal investment decisions through M&A (Bigelli & Mengoli, 2004).

Combining the well-established theory on M&A with the relatively new findings of a 'problem' known as PP conflicts, this study seeks a solution to a primary research question which is: Do large controlling shareholders expropriate from the minority shareholders in mergers and acquisitions? This study is focused on M&A activity because a number of studies have suggested that these undertakings are often used by management to serve their self-interest (Bae, et al., 2002; Shleifer & Vishny, 1997).

This research adopts the literal meaning of M&A in the economic context that can be used interchangeably to describe takeovers or M&A activities. Payment of dividends to shareholders may provide some solution to this paradigm because these payments sometimes are outcomes of misuse of capital which can compromise overall shareholders' wealth (Myers, 1977).

Existing literature on European M&As shows mixed evidence of expropriation. By defining expropriation as "the disproportional sharing of gains (or losses) among different shareholders", Faccio & Stolín (2006, p. 1416) study all acquisitions by European group-affiliated companies over the period 1997-2000 and they negate the hypothesis of expropriation. They conclude that while there might be some presence of minority expropriation in Europe, M&As are not expected to be used as a devious mechanism. In addition, M&A studies of

Swedish (Holmen & Knopf, 2004) and Belgian companies (Buysschaert, Deloof, & Jegers, 2004) contradict the expropriation notion. They argue that bidders with concentrated ownership experience positive returns post M&A.

However, a single country study by Bigelli and Mengoli (2004) on Italian acquisitions supports the expropriation hypothesis, since returns are negative (positive) when companies buy lower (higher) companies within their pyramid. They find consistent evidence of transfer of wealth from the minority shareholders to the controlling shareholders at the upper level of the pyramid.

Although there has been quite extensive research on expropriation by controlling shareholders utilising M&A in western countries, this is not the case for the Asian market. Empirical results regarding M&A in Southeast Asia remain scant and inconclusive due to unavailability of data (Kamaly, 2007; Wong & Cheung, 2009). Most M&A research is confined to performance studies and predicting M&A issues (Mat-Nor & Mohd Zin 1996; Rahman & Limmack 2000; Song 2007a).

Some exceptions to the trend are studies on expropriation of companies' profit by controlling shareholders such as a research done by Bae, Kang, & Kim (2002) on Korean companies. In their study, the authors discover that controlling shareholders use acquisitions to transfer wealth from minority shareholders to themselves. Bidder companies in business groups, known as chaebol, experience negative returns around the announcement of an acquisition, whereas the non-bidding companies belonging to the same chaebol have positive average returns at

the same time. Share prices of bidders drop when making acquisitions, resulting in minority shareholders losing out while the controlling shareholders gain from the increase in value of the acquired companies in their group.

At times, large shareholders may influence management's decision to pay a dividend at the expense of the minority shareholders by disbursing company cash for their personal advantage (Truong & Heaney, 2007). Faccio et al. (2001b) describe in their study how dividend payouts can be an evidence to capture expropriation by controlling shareholders which include public listed companies in Western Europe and East Asia. In many corporations, minority shareholders are indicated putting pressure to the management by paying out dividends in order to release cash from the clutch of insiders (management and controlling shareholders) ( La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 2000a).

It is argued in this thesis however, that higher dividends lead to higher expropriation. The management's supposedly main objective to increase shareholders' wealth may be questioned after engaging in large investment exercises such as in M&A. M&A involve major cost and structural changes to the company that increasing dividends after these actions would otherwise result in a negative impact to the overall company's performance.

Relating to this study, Banchit and Locke's (2011) is the first study that uses dividend payout as a proxy to measure PP conflicts. They find some evidence of cash appropriation from public listed companies in Asean 4 countries (except

Singapore) through higher cash dividend payout, which negatively affects company growth and hampers future development.

This thesis is novel in that there is no prior research addressing PP conflicts in M&A activities in Asian markets, particularly in the economic bloc of the Asean 5 countries. This research will contribute significantly to the relatively new area of PP conflicts in general and to the development of M&A setting and activities in Southeast Asia specifically.

## **1.2 Overview of Asean**

On 8 August 1967, the Bangkok Declaration was signed and witnessed by five foreign ministers representing five recovering war torn countries, namely Indonesia, Malaysia, the Philippines, Singapore and Thailand. Known as the Association of Southeast Asian Nations or ASEAN in short, it is the world's third largest regional economic trade bloc after the North American Free Trade Agreement (NAFTA) and the European Union (UN). Figure 1 maps the countries in the Association. Currently, there are ten ASEAN members where five other states joining later are Brunei (1984), Vietnam (1995), Laos (1997), Myanmar (1997) and Cambodia (1999). However, M&A in these countries are not significant which is explained later in Section 1.3 and shown in Table 2 that may affect the overall results. Hence, only the five main countries are analysed for this thesis.

With the exception of Thailand, all four of the father founding countries were colonised by numerous western powers for hundreds of years prior to and after World War II in 1945. These wounded but fast-healing countries were finally independent by 1967 and had to look for each other for help in their quest for economic security and socio-cultural stability (Stief, 2010). In his speech, then Foreign Minister of Singapore, Mr. S. Rajaratnam spoke about the formation:

“We (ASEAN) are not against anything, or anybody, we want to ensure a stable Southeast Asia, not a balkanised Southeast Asia. And those countries who are interested, genuinely interested in the stability and prosperity of Southeast Asia, and better economic and social conditions, will welcome small countries getting together to pool their collective resources and their collective wisdom to contribute to the peace of the world” (as cited in ASEAN history website, 2009).



Figure 1 : Graph of ASEAN.

From Embassy of Indonesia, Retrieved from <http://embassyofindonesia.it/wp-content/uploads/2011/02/ASEAN-Map.jpg>

The ASEAN region includes Malaysia, Singapore, Thailand, Indonesia, the Philippines, Brunei Darussalam, Vietnam, Cambodia, Myanmar and Laos.

ASEAN can attest to be an accomplishment as 40 years after conception it is described as probably “the most successful inter-governmental organisation in the developing world today” (ASEAN, 2009).

Table 1 Basic indicators of ASEAN 5

Country	Populations (thousands, mid 2011)	Area (sq km)
Indonesia	245,613,043	1,904,569
Malaysia	28,728,607	329,847
Singapore	4,740,737	697
Philippines	101,833,938	300,000
Thailand	66,720,153	513,120
<b>TOTAL</b>	<b>447,636,478</b>	<b>3,048,233</b>

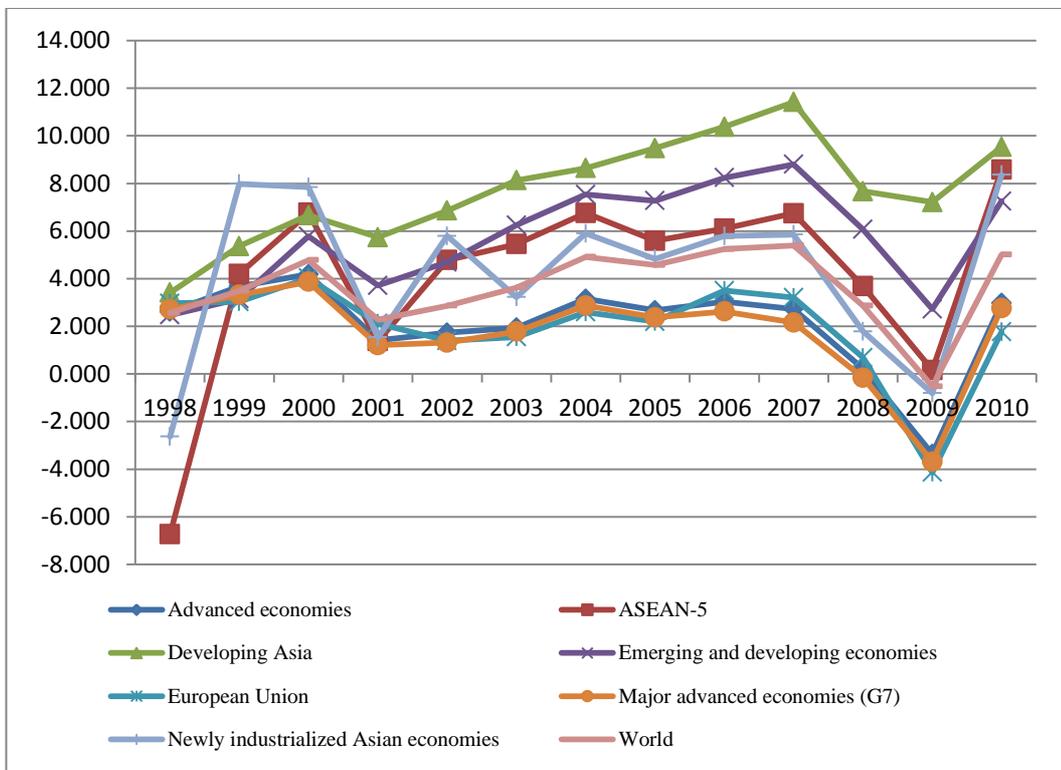
CIA World Factbook, (2011). Basic indicators of countries.  
Retrieved from CIA World Factbook.

In 2011, as shown in Table 1, the population of Asean 5 countries is in excess of 447 million, with a total area of 3 million square kilometres. Indonesia has the largest population at 245 million people while Singapore with the smallest area also has the lowest population at 4.7 million people.

Despite the fact that ASEAN presently has ten country members, this thesis is focussing on these five countries, mostly due to availability of data. Furthermore, as the association started with the integration mutually as a bloc 40 years ago, the study can provide a valid comparative result, meeting a need for more empirical research in ASEAN studies in particular and for the Asian market in general.

Growth in developing Asian markets is very high, exhibiting persistent positive annual increases in Gross Domestic Product (GDP). As shown in Figure 2, there

is a continuing expansion in economic activity through the period 1998 to 2010 for Asean 5. The Asian financial crisis in 1998 saw a long dip in the percentage change during that period, but Asean 5 quickly recovered after 1998. The positive change prevails even during the world economic downturn in 2008 and 2009 (including the developing economies and Asia); differing from many mature economies that record negative changes in GDP during 2008 and 2009.



*Figure 2 : Annual GDP (%) growth in the world 1998 – 2010*  
 World Economic Outlook Database (2011). Annual GDP (%) growth in the world.  
 Adapted from International Monetary Fund  
<http://www.imf.org/external/pubs/ft/weo/2011/01/weodata/weoselagr.aspx>

(\* Refer to Appendix 1 for details of countries in the group)

### **1.3 Development of capital control market: Asean 5 and Mergers & Acquisitions (M&A)**

Table 2 reports the total number of effective deals from years 2000 to 2008 for public listed M&A in the 10 Asean countries. There were 4,282 effective deals<sup>3</sup> which accounted for over US\$116.24 billion in transactions for the 9 year period. Malaysia had the highest number of effective deals (2,196 or 51%), then Singapore (1,333 or 31%), and Laos had the fewest (2 or 0.05%). Vietnam and Laos joined Asean in 1997, 31 years after Asean was formed while the other countries (with no figures available) joined much later. The five countries that joined much later than 1967 record insignificant M&A data, lessening the need to complete necessary analysis to generalise the overall results from this thesis.

Malaysia and Singapore have been dominating M&A activities in the region (Pickering Pacific Com, 2009) due to their advanced economic development compared to other Asean countries. Malaysia is also said to be the fastest growing market for mergers and acquisitions in the Asia-Pacific region as companies seize on record valuations and relaxed takeover rules to catch up with rivals in India and Singapore (Chong & Porter, 2010).

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<sup>3</sup> Finance industry was excluded for the purpose of this study.

Table 2: M&A deals in ASEAN 10 (2000-2008)

Nation	Effective Deals		Effective Deals (Disclosed value)	
	Number	Percentage	US\$ million	Percentage
Indonesia	144	3.36%	\$ 16,920.70	14.56%
Malaysia	2196	51.28%	\$ 29,713.63	25.56%
Thailand	393	9.18%	\$ 13,045.74	11.22%
Singapore	1333	31.13%	\$ 48,751.51	41.94%
Philippines	187	4.37%	\$ 7,793.19	6.70%
Vietnam	27	0.63%	\$ 19.24	0.02%
Brunei	0	0.00%	\$ -	0.00%
Laos	2	0.05%	\$ -	0.00%
Cambodia	0	0.00%	\$ -	0.00%
Myanmar	0	0.00%	\$ -	0.00%
	4282	100%	\$ 116,244.00	100.00%

Note: Thomson Reuters. (n.d.). M&A deals in Asean 10 countries.  
Retrieved from SDC Thomson Database.

In terms of value, Singapore as a developed nation dominates the market with US\$48.8 billion representing 42% of the total value from 2000 to 2008. Figure 3 shows the breakdown of the M&A deals value for Asean 5 market.

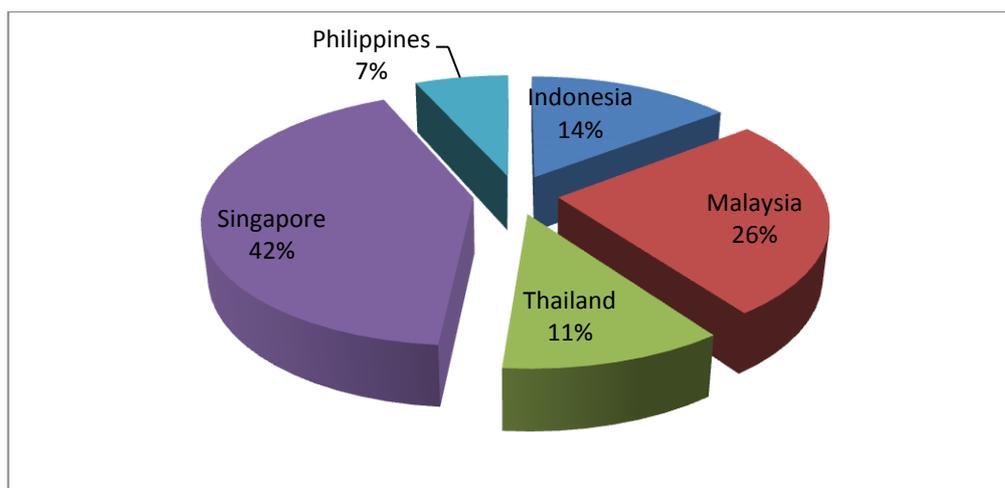


Figure 3: M&A deals value in ASEAN 5(2000 - 2008)  
Thomson Reuters. (n.d.). M&A deals in Asean 10 countries.  
Retrieved from SDC Thomson Database.

Within Southeast Asia, these five countries are regarded as major in the economic expansion through M&A. Metwalli and Tang (2002, 2009) describe that the convenient geographical proximity along the busy Strait of Malacca and the southern part of the South China Sea, as well as stable growth rate as reasons why Asean 5 has led the world's M&A activity for the past 20 years. The study of Asean 5 can be generalised for Southeast Asian.

With the advancement of equity markets, the need for growth in the M&A sector also rises. Table 3 shows the number of effective deals including the disclosed values from 1980 to 2010. There were no data available prior to 1980 which shows that the activity in Asian generally was still at an infancy level. From only 30 confirmed deals for public acquirers in the 1980s, M&A deals grew to 2,350 deals in the 1990s. The trend continued from 2000 to 2010 when M&As more than doubled to 5,876 confirmed deals.

The value of deals reported was from a mere USD0.153 million in the 1980s to a whopping USD166.48 million in total in the 2000s. Some of the explanations for this phenomenal growth of M&A activities in the region were the drive for companies to acquire market share in the rapidly developing growth of the equity markets. M&A is regarded the fastest and less risky mode of entering into a new business in order to gain technology and market share (Song, 2007b).

Table 3: Number of M&A deals from 1980 to 2010

	<b>1980-1989</b>	<b>1990-1999</b>	<b>2000-2010</b>
<b>Confirmed M&amp;A (without value deals disclosed)</b>	30	2350	5876
<b>Confirmed M&amp;A (deals value disclosed)</b>			
Indonesia	0	44	188
Malaysia	5	687	1285
Singapore	13	442	1103
Philippines	1	62	176
Thailand	0	99	527
<b>Total deals</b>	<b>19</b>	<b>1334</b>	<b>3279</b>
<b>Deal value (USD Millions)</b>	<b>.153</b>	<b>60,146.02</b>	<b>166,487.24</b>

Note: Thomson Reuters. (n.d.). M&A deals in Asean 10 countries. Retrieved from SDC Thomson Database.

## 1.4 Problem statement

In many public listed companies with concentrated ownership, non-controlling shareholders or minority shareholders have not been treated fairly due to lack of development in capital markets that leads to deficient protection for them (La Porta, Lopez-de-Silanes, & Shleifer, 1998; La Porta, et al., 1999). In addition, companies that have greater level of ownership concentration may also have lesser in firms' value compared to those companies with more dispersed ownership (Barontini & Siciliano, 2003).

An important agency issue that has not been the core of attention in public listed companies with large, controlling shareholders is known as PP conflicts. The deterioration of firms' values in acquiring companies post-M&A may be

aggravated with the existence of PA as well as PP conflicts. There have been many studies in PA conflicts in developed markets like the US and UK, but these studies may not be a fair indicator of the agency disputes in Asean markets which are dominated with highly concentrated ownership.

In developed countries, corporate control is used as one of the mechanisms for external control. Although this mechanism does exist in Asian countries, it is not effective due to high ownership concentration and lack of regulatory shareholders' protection. PP conflicts are more relevant to address the Asean market. This has not yet been established in the literature for Asean markets in M&A studies. This study aims to study the existence of PP conflicts in the Asean 5 markets via M&A. Furthermore, PP conflicts pre-and post-M&A will be analysed in this study to ascertain which level of controlling shareholders are dominant in influencing performance. Finally this thesis will answer the question of whether concentrated ownership in Asean 5 markets empowers large shareholders to expropriate income in M&A activities for their own benefits.

The role played by dividend payouts ratio should be inherent in addressing concentrated holding companies or PP conflict issues. Dividend payment is regarded as an avenue for the controlling shareholders to extract resources away from the company (Easterbrook 1984; Faccio et al. 2001; La Porta et al., 2000a) for their own private benefits (Chiou et al., 2010). Recently, Banchit and Locke (2011) find that PP conflicts do exist in the Asean 4 (Indonesia, Malaysia, Singapore and Philippines) market via higher payment of cash dividends.

Metwalli and Tang (2002) report that M&A activities in Asia have expanded significantly from US\$16.1 billion in 1990 to US\$48.2 billion in 2000, and by 2004 as noted by Kim (2009) one third of total world M&A activities were in Asia. In 2007 the transaction value reported by Metwalli and Tang (2009) rose to US\$135.3 billion contributing to the positive trend during mid-2000s. It has also been reported that the value of deals in Asean 5 was from a mere USD 0.15 million (19 deals) in the 1980s and had increased dramatically to USD 166.48 billion (3277 deals) in the 2000s as shown Table 3. This shows that M&A activities in the selected Asean countries can provide a solid platform for the study of PP conflicts in the region.

## **1.5 Research questions**

The main research question is: Do large shareholders expropriate from minority shareholders in mergers and acquisitions in Asean 5 (Indonesia, Malaysia, Singapore, Thailand and Philippines)? The other research questions in relation to the above are:

1. Do large, controlling shareholders impact to PP conflicts in Asean 5 mergers and acquisitions?
2. Do dividend payouts change after M&A in Asean 5 acquiring companies?
3. Do large shareholders exacerbate PP conflicts? If yes, at what percentage is the largest shareholders' threshold that has an impact on PP conflicts?
4. Do the second largest shareholders help to exacerbate PP conflicts?

5. Is principal-agent (PA) a prominent problem for acquirers in Asean 5 companies?

## **1.6 Research objectives**

1. To determine if large, controlling shareholders have an impact on PP conflicts in Asean 5 mergers and acquisitions.
2. To determine whether dividend payouts change after M&A in Asean 5 acquiring companies.
3. To determine the concentration threshold level of large shareholders in Asean 5 mergers and acquisitions.
4. To determine whether second largest shareholders exacerbate PP conflicts.
5. To also investigate whether principal-agent (PA) conflict is a prominent problem for the acquiring companies in Asean 5.

## **1.7 Significance of the study**

This thesis is novel in that there is no prior research in these mostly developing markets addressing M&A and related PP conflicts issues in Asean 5 countries. So far, only two studies have been done on the issue of PP conflicts in M&A in a single Asian country. Chen and Young (2009) address the PP perspective with cross-border M&As in China's public listed companies while Bae, Kang, & Kim (2002) discover that controlling shareholders use acquisitions to transfer wealth from minority shareholders to themselves.

As M&A activities continue to flourish in this region, they impact significantly on growth of GDP in these countries and also on the distribution of income. Accordingly, the findings from the research will have significant implications for policymakers and practitioners not only in the five selected countries, but also on policymakers and practitioners in other trading partners of ASEAN 5. Additionally, this thesis will add to knowledge and contribute to future research and education in four key areas.

First, the study will contribute to the understanding of PP conflicts in the M&A context. Most Asian companies experience the unique problem (Dharwadkar, et al., 2000) of PP relationship but previous research is mostly based in developed markets and focuses on PA conflicts. This is supported by Young et al.(2008) as a major and especially prevalent concern in emerging markets. Such studies in developed countries with mature capital markets usually find a negative impact of agency conflicts on company value. Questions remain unanswered as to how much impact the PP conflicts have on the company performance associated with M&As. Decision makers and investors, especially minority shareholders, can utilise the findings to understand the impact of M&A initiatives on their funds invested and the related risks and potential gains. Valuation models associated with this analysis will be of assistance to investors in the evaluation of their investment strategies.

Secondly, the study will significantly enhance knowledge about M&A activities in Asean 5 countries. Comprehensive cross-country research on M&A activities and PP conflicts has not been undertaken previously for the Asean 5 countries.

This may have been due to the lack of available continuous long-term data, but this problem is now overcome with the availability of a database. A further significant contribution is the empirical work focusing on the long-term impact of companies involved in M&A.

Thirdly, this research is the first direct study of PP agency conflicts, ownership and financial variables for Asean 5 listed companies. Prior research in mature markets provides insights, but these are not necessarily generalisable in the developing market context and this study assists in bridging this gulf.

Finally the inclusion of time-invariant (including rarely changing variables) and time-variant variables in the panel data model analysis provides additional confirmation of the veracity of the modelling and robustness of analysis. Compared to prior studies undertaken elsewhere, the sophistication and robustness of the micro-econometric analysis used in the research is a significant enhancement.

## **1.8 Organisation of thesis**

The remainder of the thesis is organised as follows. In Chapter 2 a review of the main themes of M&A and PP variables' literature is undertaken. This review is primarily based on previous studies that focus on both theoretical and empirical research for the themes. Chapter 3 provides a discussion on the institutional framework as well as the M&A practices in Asean 5 countries. It also includes a brief discussion on the development of institutional background for each country and the role of various monitoring organisations.

Chapter 4 describes the hypotheses development and research method, measurement of variables, data and Chapter 5 provides a discussion on the methodology and econometric framework undertaken for the empirical analysis. Chapter 6 provides a discussion on the empirical results for univariate analysis, while Chapter 7 provides the empirical results for the multivariate analysis. Finally, Chapter 8 presents the conclusions, contributions and future directions for PP conflicts' research.

## **CHAPTER 2: REVIEW OF LITERATURE**

### **2.1 Introduction**

The interconnectedness of financial issues is well established. The links between financial policy and ownership structure (M. Jensen, 1986; Leland & Pyle, 1977), dividend and management ownership (G. R. Jensen, Solberg, & Zorn, 1992; Moh'd, Perry, & Rimbey, 1995; Rozeff, 1982) and dividend with large shareholders (Faccio et al., 2001b; La Porta, et al., 2000a) have been largely substantiated. The potential relationship between dividend payment decisions with large shareholders associated with mergers and acquisitions (M&A) has been somewhat neglected and this is especially the case in Asian companies where the institutional framework and ownership structures are different from companies in mature economies.

This chapter discusses relevant literature explaining how large, controlling shareholders expropriate minority shareholders. This principal-principal (PP) conflict is the central agency problem facing companies in the Asean 5, especially those active in M&A. These companies are also characterised by highly concentrated ownership, and the lack of investor protection in their capital markets opens up the possibility for large shareholders to aggravate PP conflicts.

## **2.2 Agency Theory: Principal-Agent (PA) conflicts**

Eighty years ago, Berle and Means (1932) explained in their well-known book, *“The modern corporation and private property”*, how a large number of small public companies in the United States were becoming more widely-held. The authors found that shareholders in modern corporations were losing their rights and power to a group of managers or directors who ran their businesses. The shareholders were also described as just being capital suppliers with even less priority than bondholders or lenders. With this phenomenon, the main consequence to the business structure is the separation of ownership and control.

M. Jensen and Meckling (1976) label this separation and control as an agency problem and define it as “a contract under which one or more persons (the principal(s) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent (M. Jensen & Meckling, 1976, p. 308).

Agency relationship is when there are “two (or more) parties when one, designated as the agent acts for, on behalf of, or as representative for the other, designated the principal” (Ross, 1973, p. 134). At the same time, investors around the world are willing to part with thousands or millions of dollars’ worth of their personal wealth and voluntarily transfer their shareholding control and rights to strangers they call managers and boards of directors.

Agency theory explains that conflicts between different stakeholders may vary and may be classified as managerialism (conflicts between shareholders and

management), asymmetric information (conflicts between large and minority shareholders), debt agency (conflicts between shareholders and debt holders) and other agency conflicts (between managers and other parties companies deal with) (John & Senbet, 1998). In summary, agents are assumed to be self-interested and likely to pursue goals for their own interest which could damage shareholder wealth, i.e. value of company.

M. Jensen and Meckling (1976) continue by clarifying that the agents' actions in running the business using the shareholders' resources may depart with the principal's main objective of maximising their investment. The actions by agents who are core in the decision making process of the company will sometimes result in negative impacts to the principal (owner or shareholder of the company) - also known as principal-agent (PA) conflicts. Agents may take direct or indirect financial benefits at the expense of maximising shareholders' wealth. Examples include on-the-job consumption of company assets for their own benefits, redirecting corporate assets to personal accounts and making non-profitable investment decisions.

Past studies use two general internal and external mechanisms to show mitigation of PA conflicts by improved company's performance. Internal mechanisms, including better governance by boards of directors, concentrated ownership and remuneration packages for managers and financial policies (debt and dividend policies) are some of the governance measures exercised to align PA goals (Hermalin & Weisbach, 1991; G. R. Jensen, et al., 1992; Rosenstein & Wyatt,

1997). These mechanisms however, are not sufficient to eradicate all PA conflicts given the complexity of modern corporations.

It is suggested that external mechanisms are used to complement the internal controls already in place to minimise PA conflicts. These include market control (mergers and acquisitions), managerial labour market and product market (M. Jensen, 1993; Schleifer & Vishny, 1997). Managers are threatened by the possibility of being taken over so they react by minimising inefficiency within the company.

Research into costs associated with PA conflicts is documented quantitatively by Ang, Cole, & Lin (2000) who use two alternative accounting measures for companies sampled; effective or expense ratio (ratio of operating expenses to annual sales) and efficiency ratio (ratio of annual sales to total assets). Using Jensen and Meckling's (1976) theory on a sample of 1,708 small and unlisted United State (US) companies in 1992, they divided them into two groups: zero-agency-costs (manager is sole shareholder) companies and non-zero-agency-costs (management owns less than 100% of company's equity) companies. They confirm that PA problems persist when results show that agency costs are more severe when managers are not the sole shareholder. Further multivariate analysis also shows that agency costs are positively (negatively) related with the number of non-manager shareholders (level of management ownership).

Many researchers observe that owners or shareholders of companies in capital markets outside the US and the United Kingdom are not dispersed shareholders,

but are rather more concentrated (Claessens, et al., 2000b; La Porta, et al., 1999). For example, Claessens et al. (2000) find that a single shareholder controls more than two-thirds of the 2,980 companies taken in their sample across nine Asian countries. They also report that concentration of control is decreasing with the level of countries' economic development where more dispersed ownership occurs in Japan, followed by Korea and Taiwan.

There is also extensive family control in more than half of East Asian corporations. La Porta et al. (1999), Claessen et al. (2002), and Dyck and Zingales (2004) find that the agency problem noted by Berle and Means (1932) and Jensen and Meckling (1976) are potentially less applicable outside the US and the UK.

Companies with large and minority shareholdings have other agency problems (Yen & Andre, 2007), especially in countries with weak legal and regulatory protection for public and minority shareholders (Dharwadkar, et al., 2000). These researchers believe that the main agency problem outside the US and UK is when the large, concentrated shareholders expropriate company assets to the detriment of the minority shareholders.

### **2.3 Agency Theory: Principal-Principal (PP) Conflicts**

Research in mature markets suggests that large shareholders are important in reducing PA agency conflicts. They have higher incentives and more resources to efficiently monitor company performance (M. Jensen & Meckling, 1976; Schleifer & Vishny, 1986). These large shareholders may attain private benefits

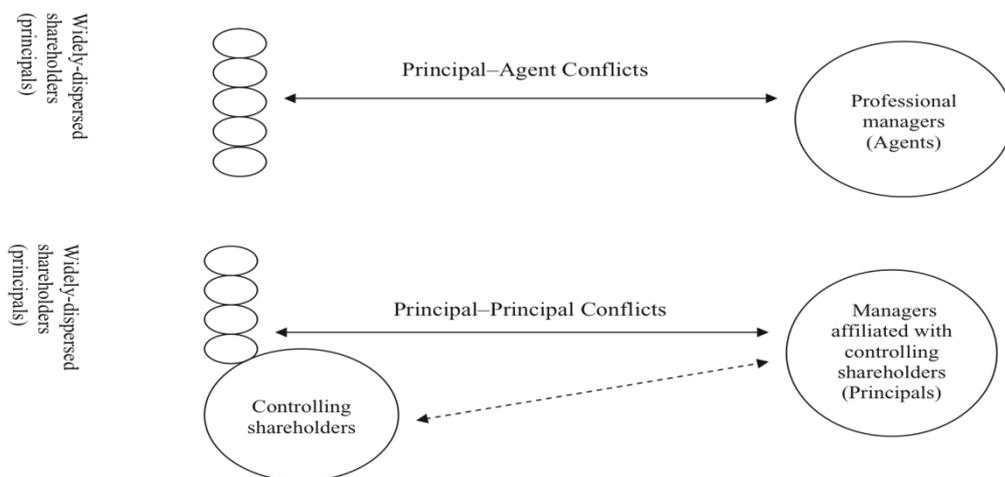
from this control that may be translated into financial and non-financial benefits for them. A non-financial benefit is the amenity of being in control (Demsetz & Lehn, 1985) while financial benefits from being in control can be explained in the context of expropriating the wealth of minority shareholders (B. Maury, 2004).

Dharwadkar et al. (2000) stress that the traditional agency solutions to mitigate PA conflicts in developed economies are not necessarily effective in emerging economies due to that the existence of other unique conflicts. Two different types of ownership and control frictions that need to be considered are the traditional PA conflicts and principal-principal (PP) conflicts (Dharwadkar, et al., 2000; Young, et al., 2008).

PA conflicts are a result of lack of goal congruence between shareholders (principal) and managers (agent) who are appointed to administer the company's assets. Though this traditional problem has been widely explored, Dharwadkar et al. (2000) point out that agency theorists offering solutions in mature markets have not considered the PP problem. Figure 4 provides a schematic explanation of the difference between PA and PP. In the context of PP conflicts, the underlying factors of information asymmetry, moral hazard and adverse selection still prevail, but the problems lie mainly in the conflicts between large and small shareholders (Su, Xu, & Phan, 2008).

PP conflicts consist can be explained as a range of subsets. Large shareholders might use their voting power to control the company for their own interests while other dispersed shareholders and stakeholders bear the cost (Johnson, La Porta,

Lopez-de-Silanes, & Shleifer, 2000). Conflicts between shareholders may be shown in outright expropriation, such as controlling shareholders not paying dividends but appropriating funds for themselves, transferring profits to other companies they control and; indirect expropriation by making non-profitable business ventures. (La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1999; Morck, Stangeland, & Yeung, 1998; Shleifer & Vishny, 1997; Song & Chu, 2011). Managerial entrenchment is also an issue (Schulze, Lubatkin, Dino, & Buchholtz, 2001) through appointing unqualified family members to top management positions.



*Figure 4 : Principal-Agent (PA) and principal-principal (PP) conflicts,*  
 Retrieved from “Corporate governance in emerging economies: A review of the principal-principal perspective.” by M. N. Young, M. W. Peng, D. Ahlstrom, G. D. Bruton & Y. Jiang, 2008. *Journal of Management Studies*, 45(1), p. 200.  
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PP conflicts are potentially more detrimental than PA conflicts in emerging economies. Faccio, Lang and Young (2001b) document the problems of East Asian corporate governance as more severe than in mature markets due to the extraordinary concentration of control. Ownership in East Asia is mostly block or

single shareholders (Claessens, et al., 2000b; Lins, 2003). Weak legal protection for minority shareholders (Dharwadkar, et al., 2000; R. La Porta, Lopez-de-Silanes, Shleifer, & Vishny, 1997) results in a more vulnerable status for minority shareholders than would be the case in more mature markets with stronger legislation.

## **2.4 Agency theory and expropriation**

Expropriation can be defined broadly as ‘the act of taking from the owner’ (Singhai, 2002). Agency theory categorises the risks of expropriation in two settings, the first setting is when shareholders engage outsiders to run the corporations as decision makers. Here, the main victims will be the shareholders of the company when managers’ actions are not in accordance with the maximisation of shareholders’ wealth (Jensen and Meckling 1976).

Also, there is the potential for shirking; managers may expropriate shareholders by being incompetent, conducting excessive or insufficient investment or resisting value-increasing takeovers. Johnson, Boone, Breach and Friedman (2000) boldly express expropriation by managers as ‘stealing’ and illustrate in their paper how managers steal company’s retained earnings and earn private financial utilities from these actions. The authors note that some of the ways management steal are by paying their own personal debts, opening up another company with different shareholders and crediting money to foreign bank accounts.

In the second setting, dominant shareholders assume control over managers and victimise minority shareholders by expropriating their wealth. This condition exists when control of companies is in the hands of concentrated owners (individual, families or business groups). Claessens et al. define this expropriation as ‘the process of using one’s control powers to maximise own welfare and redistribute wealth from minority shareholders’(1999, p. 2). The agency problem related to this form of expropriation is more complicated when it contradicts the assumption that large shareholders who have the power and means to monitor managers are expropriating the other minority shareholders instead.

Some of these forms of conduct can be outright expropriation, such as taking a company’s resources for themselves by not paying out dividends, tunnelling or transferring resources out to another company within the business group, corporate opportunities, mergers and acquisitions (Johnson, La Porta, et al., 2000).

There is a need for more investigation into this second form of expropriation. Literature has provided enough evidence and clarity associated with manager-shareholder conflicts and provides effective governance for companies to be able to punish unaccountable managers or reward those who perform well. However, the complexity of expropriation with costs or benefits associated with large and minority shareholders, especially in emerging markets calls for answers in more empirical studies.

#### ***2.4.1 Evidence of expropriation***

Various measures have been employed to proxy expropriation of minority shareholders in the finance literature. Claessens et al. (1999) utilises discount in Tobin's  $q$  (market value of assets divided by book value of assets) as their dependent variable with ownership variables. They compare the values of  $q$  of widely-held companies that embark on corporate diversification and have at least one shareholder with 10% ownership, 20% or more ownership in the year 1996. Their study consists of 2,368 companies with ownership data from 1996 from countries in Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan and Thailand. Only small samples are available from Indonesia (6%), Malaysia (8%), Philippines (4%), Singapore (7%) and Thailand (6%).

In this paper, Claessens et. al. conduct ordinary least square (OLS) fixed-effects and random-effects regression models on these data and conclude in their study that increasing ultimate owners' control increases their ability to expropriate minority shareholders in East Asian countries. Their argument is that this occurs because the controlling shareholders take more benefits out of the diversification exercise and only bear part of the costs. This can also be investigated in performance studies and is not entirely looking at expropriation per se.

Agency theory provides a framework for articulating expropriation as it applies to dividend payout policies of companies. Faccio et al. (2001b) build their expropriation proxy by relating dividend rates with controlling shareholders' ownership rights (O) and their control rights (C). Their definition of O is the

controlling shareholder's share of ownership in the corporation, while C is the control rights. For example, an investor who owns 50% of shares in company A, 40% of shares in company B, and 30% in company C has  $(0.5 \times 0.4 \times 0.3)$  6% of O in A, but 30% of C. Their argument is that dominant controlling shareholders have the discretion to transfer company's wealth by paying out more dividends. Most of the time managers may not reduce the existing dividend rates without risking a sharp fall in share market values and future access to capital. Additionally, Faccio et al. also run OLS regression in a sample of 5,897 corporations from East Asia and Western Europe, collecting ultimate owners (for year 1996) of each corporation who own at least 5 per cent of shares. Based on their result, they report that expropriation is highly detrimental in Asian companies (lower dividend paid) but not in Europe. They also assert that the presence of a second largest shareholder may combat expropriation pressure from the largest shareholder. The authors also summarise that the controlling shareholders may extract high returns from big projects financed by unrepayable debts that had low or negative outcomes for the companies' financial performance.

It should be noted that the above study was done at the height of the financial crisis in 1997-1998 in the Asian market and this macroeconomic catastrophe definitely had an impact on the overall results of the study, especially when compared with the less affected Western markets at that time.

The perplexity of why companies pay dividends motivated Adjoud and Ben-Amar (2010) to explain expropriation by also using dividend ratios but with relation to

corporate governance variables in Canada. They use a one year lagged dividend as a determinant, consistent with Lintner (1956), to maintain stable dividends over time. Their results do suggest that better shareholder rights are associated with higher dividend payouts supporting the outcome hypothesis of dividend which means that shareholders are well protected by the governance system in the developed market. The outcome model of dividends means higher dividends with better corporate governance quality while the substitution model of dividends means lower dividends with higher governance quality (better governed firms have lower agency costs because of separation of ownership and control) (La Porta, et al., 2000a)

When a controlling shareholder in a business group in India wants to transfer or tunnel profits across companies (to subsidiaries), Bertrand, Mehta and Mullainathan (2002) explain that this shareholder may do so by offsetting non-operating losses and gains to another company he owns. The authors called this method of expropriation as propagation of shocks, and describe this process of diverting cash from companies where the controlling shareholder has low-cash-flow-rights to another company he has high-cash-flow-rights (high ownership rights) in. These shocks between transfers are isolated using regression to measure company's actual reported performance on its predicted performance, and on the predicted performance of other companies in its group. The authors use firm-level data on earnings, industry, group membership and ownership structure and indicate that though they would have used dividends as their expropriation proxy, lack of availability in data prevented them to do so.

The legal system provides another strand of literature that could be used to measure expropriation. It is noted in the literature that the protection of minority shareholders who incur higher risk amongst all the other stakeholders in the corporation can only be addressed by the legal system of the country. Direct intervention in the form of sound corporate governance and strict enforcement actions by government is the only way to mitigate the blatant actions of some controlling shareholders that may be a costly failure to the whole market and country's reputation (Johnson, La Porta, et al., 2000; La Porta, et al., 1998; Singhai, 2002).

Basically, courts in civil law and common law countries approach tunnelling or expropriation actions subjectively based on their definition of scope. Courts in civil law countries such as France, Italy and Belgium may accommodate tunnelling more often than courts in common law countries such as the US or UK. This is because civil law assumes that the business transaction is consistent with the scope of directors' duties (especially if the controlling shareholder is in the business group of companies), and are not based on fairness to minority shareholders (Johnson, La Porta, et al., 2000).

#### ***2.4.2 Large shareholders and expropriation***

Large shareholders are deemed to be advocates for an ultimate balance in decision making between the shareholders and managers. In publicly held corporations, these large shareholders hold a sizeable fraction of all voting rights and may solve the problems of 'modern capital markets' where there is always the inevitable agony in monitoring management to act in the best interests of the shareholders.

The large shareholders are in a position where they can benefit from inside information they can obtain from management, while at the same time being able to influence the corporate outcomes because of their powerful voting rights (Zeckhauser & Pound, 1990).

Different definitions of large shareholders are analysed in the literature. Dahya, Dimitrov and McConnell (2008) define a dominant shareholder as one who can significantly influence selection of the company's board. Their data include the largest single owner of voting rights in companies with at least 10% of the company's votes. La Porta et al. (1998) and Claessens et al. (2000) identify controlling owners when they hold more than 20% of the shares in the company. In reality, while 33% voting power would in fact give de facto control, Loh (1996) describes a 15-25% control over voting rights as sufficient for control over a corporation. It is ubiquitously agreed that large or controlling shareholders are those who are more likely to wield a large influence over a company and thus impact decision-making processes. Shareholders who hold less than the controlling shares are regarded as the minority or small shareholders.

Cronqvist & Nilsson (2003) assert that large shareholders frequently own more control rights than cash flow rights in public traded companies, and thus have a higher entrenchment effect to be able to expropriate the minority shareholders. They use owners with 25% or more of Swedish public listed company votes to assume control and find that lower valuation (Tobin's q and return on assets) outcome associated with controlling owners. The authors find that since Sweden is a developed country with efficient legal enforcement and accounting standards,

the agency problem of owners stealing by direct diversion of cash flow into the pockets of the controlling owners) is not appropriate to explain this outcome of lower performance as can be explained in other developing market (Johnson, Boone, et al., 2000). However, these low performances occur due to the fact that these large shareholders are more passive in their actions by making sub-optimal investment.

Claessens et al. (1999) state that expropriation is the “process of using one’s control powers to maximise own welfare and redistribute wealth from minority shareholders”. They confirm that the agency problem in East Asian countries is not because unaccountable managers are not dealt with, but rather due to the issue of expropriation of minority shareholders by controlling shareholders. The evidence of this outcome is when they find a positive relationship between expropriation (lower market values) and the separation of cash flow from voting rights. Morck, Andrei and Vishny (1988) further illustrate that expropriation occurs when company performance decreases where large owners assume full control and extract private benefits from the minority shareholders.

Fama and Jensen (1983) demonstrate various ways in which managers who own enough shares can dominate board members; by paying themselves with an excessive salary; negotiating ‘sweetheart’ deals with other companies under the manager’s control; investing in negative-net-present-value projects; and withdrawing corporate funds. Stulz (1988) notes how managers with large shareholdings feel entrenched and are not afraid of losing their jobs even if they have to resist value-increasing tender offers.

Large shareholders may also opt to collude with managers to divert resources off the company and share private benefits (Becht, et al., 2010; Burkart & Lee, 2008). These conflicts may be exacerbated when large shareholders also hold managerial positions in the company. Furthermore, one of the key assumptions of PP conflicts is that managers act as agents and answer directly to the controlling shareholders (Young, et al., 2008).

Developed markets with high investors' protection believe concentrated shareholders help to eradicate agency conflicts. Shleifer and Vishny (1986) suggest in their paper that large shareholders are needed to monitor managers and to look for ways to better company performance. Basically, no expropriation by large shareholders is found for public listed companies in the United States (Holderness & Sheehan, 1988). In fact, these controlling shareholders appear to reduce agency costs by constantly monitoring the management team actions as well as supervising them. Since the stakes for controlling shareholders in these companies are higher, it is no doubt that they have more incentives to monitor top management decisions for a sustainable performance (Alchian & Demsetz, 1972). Furthermore, power rests more heavily among controlling shareholders over management in lieu of minority shareholders (Cubbin & Leech, 1983)

Investors are also known to invest in companies when they know companies have controlling shareholders that may be likely to expropriate. Giannetti and Simonov (2006) observe that in a developed market such as Sweden, domestic investors and individuals who are board members prefer to invest in companies in which controlling shareholders have stronger incentives to extract private benefits

because of the strong information connection they have between each other. They conclude that the fear of expropriation may be stronger with dire consequences for markets that lack both investor protection and enforcement of law.

Concentrated ownership may result in unfavourable outcomes for companies with less investor protection in certain markets. La Porta, et al. (1998) show that companies with controlling shareholders are not willing to undertake diversification to reduce risks. Another issue may be these companies may find problems in raising equity finance as minority shareholders are afraid of being expropriated by the managers and large shareholders.

The self-interest of agency problems proposed by Jensen and Meckling (1976) state how managers make decisions for companies and act not entirely for the benefit of shareholders but rather to satisfy their personal needs. Gomez-Mejia et al. (2005) claim that this view help to explain how managers will work with any party to satisfy their private interest. Therefore, the issue of large shareholders acting on behalf of the minority shareholders advocated by agency theorist may also be in question since their interest will much more closely tied with the managers/executive directors (Davis, 1991).

Board members are elected to represent company shareholders in order to align the objectives and interests of principals with the actions of agents. However large, controlling shareholders have stronger ties to the managers/executive directors and are known in the literature to have a considerable influence over the election of directors, especially when most of public companies are mostly owned

by family members. Hence, the board and managers owe their allegiance to the controlling shareholders as opposed to the whole body of investors (Singhai, 2002).

This study does not take into account board ownership in the analysis as this will not give a true representation of corporate ownership in the East Asian market. This is because many of these holdings are owned by directors through indirect ownership and usually in the form of private limited companies or nominee companies whose identities remain anonymous (Chu & Cheah, 2004).

A comprehensive analysis of Asian companies' ownership structure by Claessens, Djankov, & Lang (1999a) reports that the ten largest families in Indonesia, Philippines and Thailand control half of the corporate sector, while in Malaysia and Singapore they control a quarter. The researchers also note in the year 2000 the output of the top 15 family-controlled companies make up 21.5% of GDP in Indonesia, 76.2% in Malaysia, 48.3% in Singapore, 46.7% in the Philippines and 39.3% in Thailand (Claessens, et al., 2000b). There is much interlink among these controlling companies, direct and indirect, and also between companies and their governments that have formed weak legal and regulation systems.

A number of studies have identified the main players in the large shareholdings in East Asian companies. Large controlling family businesses such as the Suharto family in Indonesia and Marcos family in the Philippines are also known to have controlling stakes in many industries. Some of Thailand's large companies are owned by the royal family and the military. In Malaysia and Singapore, large

state-owned enterprises and political parties have substantial business holdings (Claessens, Djankov and Lang, 1999).

Asian market studies, as explained above, contrary to empirical results derived in developed markets, have concluded that concentrated ownership may hamper companies' overall value due to expropriation issues. Shleifer and Vishny (1997), Morck et al. (1998), and La Porta et al. (1999) state that as large shareholders hold more control over a corporation, these conflicts will manifest themselves in the form of expropriating the small shareholders. Claessens et al.(1999) summarise it as: "Controlling shareholders not paying out dividends by enriching themselves, or transferring profits to other companies they control, or through pursuit of non-profit-maximising objectives by large investors" (p.5).

Not only that, Morck et al.(1998) also show that concentrated control may stunt companies' growth as opposed to companies with diffused ownership as large shareholders may put their interests first by preserving their investment in the company. By using cash flow associated with controlling shareholders, La Porta, Lopez, Shleifer and Vishny (1999) state that countries that have laws to better protect minority shareholders will also have higher valued companies than those companies with less regulation.

Some of the merits in legal protection include whether shareholders may send a nominee if they cannot attend a meeting for a vote; ability to mail their proxy vote directly; allowing legal mechanisms against oppression by directors; and that

minority interests may vote cumulatively for their choice of directors or board or if the company is mandated to pay dividend (La Porta, et al., 1998).

The weaker the formal legal institutions and regulatory protection of the public and minority shareholders, the more concentrated ownership in companies becomes (Young, et al., 2008). The concentration of ownership impedes further development of corporate control (Guan, 2005) and may aggravate agency conflicts. In Thailand, minority shareholding is limited and diffused with their rights difficult to uphold due to the infrequency of public meetings for shareholders. Further problems, such as confused roles and responsibilities of government agencies in regulating shareholder rights and weak creditors' control because of long-term "cronyistic" relations between banks and companies (Brown, 2006, p. 285), worsen the conditions for minority shareholders.

Another instance is in Malaysia where, according to Guan (2005), large shareholders and other insiders who do not work towards maximising the value of the company may escape punishment from threat of takeover. This is because large ownership stakes arising from a company's concentrated shareholding permits most takeovers in the country to occur through friendly negotiations between the controlling shareholders of the involved companies (Guan, 2005). This may confirm the comment by La Porta et al. (1997) that minority investors in countries with low level of investor protection, such as in Asean 5 countries, will be less protected in the event of corporate wrongdoings.

It has been proven by Nam (2001) that expropriation among shareholders seems to be very serious in Asian business groups. He reiterates that the agency view of managers attempting to maximise their interests in diversification is not even in question, especially when distorted resource allocation may occur even before corporate profits are determined. Hence, the aim to detect expropriation via financial or market values may be deceiving because of this view.

Faccio et al. (2001) observes that companies with controlling shareholders in Asia extract high returns from projects that incur negative investment returns and pay lower dividends than their counterparts in Europe. Chang (2003) finds large shareholders in Korean companies use insider information to transfer profits to less profitable and less promising affiliates through intragroup trade, and that there is no evidence of better company performance with concentrated ownership.

The role of second largest shareholder may be efficient to curb the agency problems arising from the largest shareholder. In a developed market, the second large shareholder actually reduces the ability of the controlling shareholder to effectively control the corporation (Barclay & Holderness, 1989). However, as many East Asian corporations have single controlling owners with no second controlling owners (Claessens, Djankov, & Lang, 2000a), this may actually intensify the agency conflicts in the market.

## **2.5 Empirical studies on PP conflicts**

As discussed above, large controlling shareholders may create another set of agency conflicts especially in emerging markets, and Asia in particular. This has brought more empirical research to recent focus on large shareholders and PP conflicts.

It is noted by Young et al. (2003) that there is a vagueness in the distinction between PA and PP. They reiterate that the over-riding characteristic of PP conflicts is the use of ownership control to expropriate minority shareholders. It is also concluded that some PP characteristics are “concentrated ownership and control, poor institutional protection of minority shareholders, weak governance, lower firm valuations, lower levels of dividend payout, inefficient strategy, less investment in innovation and expropriation of minority shareholders” (Young, et al., 2008, p. 197).

Empirical studies investigating PP conflicts are still relatively new and not well developed. Su et al. (2008) use three dependent variables to capture PP conflicts: level of board compensation, board size and the proportion of independent directors in listed Chinese companies from 2000 to 2003. They assert that these board members are usually being appointed by large shareholders to represent them in making decisions on matters such as corporate diversification or capital expenditure.

Su et al. use the Herfindahl index (Kwoka, 1985) of largest shareholders by squaring the sum of the percentage of shares held by the 10 largest shareholders. Hence, one way to detect the expropriation is to examine the board structure. Due to the size of their sample, they employ feasible generalised least squares (FGLS) regression to test their hypotheses. Their results show a curvilinear relationship where low levels of agency costs are detected at low to medium levels of concentration, while at higher levels, increasing agency costs are reported.

It appears that there are grounds for accepting that board members owe their allegiance to the large shareholders who appointed them. Board monitoring is less efficient in Asian markets, and their appointments are basically to conform to the country's code of conduct. Here, board size and board composition do not influence the dividend policy in the corporation (Subramaniam & Devi, 2011). Besides, board compensation is essentially audited and monitored by the audit committee and may not reflect the true nature of expropriation by large shareholders.

Chen and Young (2010) extend the research of PP conflicts by analysing a sample of cross-border mergers and acquisitions of Chinese companies from 2000 to 2008. In their analysis, they study performance measurement using cumulative abnormal returns (CARs) to predict company value when the government is the majority owner of the bidders. These findings favour the view that in China the negative relationship with government ownership and CARs provides some evidence that increased ownership is associated with increased PP agency costs.

Another study by Jiang and Peng (2010) analyses 877 publicly listed large corporations with concentrated ownership in seven Asian countries. These countries are Hong Kong, Indonesia, Malaysia, Singapore, South Korea, Taiwan and Thailand. They explore PP conflicts during the economic crisis that hit Asia in 1997 by taking dependent and independent variables in 1996, a year before the crisis. A 5% control right (percentage of total outstanding shares) is used to measure the largest shareholder concentration and control, while their dependent variable is excess control (difference between cash flow rights and control rights of the largest shareholder). They conclude that family firms have higher excess control rights which may permit them to expropriate. The presence of multiple blockholders (companies that have more than one shareholder with more than 5% control rights) is found to be able to constrain potential expropriation of minority shareholders.

Banchit and Locke (2011) explore the concept of PP conflicts by measuring them with cash dividends paid out to large shareholders. A cross-sectional analysis is conducted in a small sample of 194 companies in Asean 4 (Indonesia, Malaysia, Thailand and Philippines) by regressing cash dividend to total assets, with other variables including the large shareholdings (measured at 5% to 20% concentration level). They assert there is evidence that suggests the presence of large shareholders paying more dividends and this impacts negatively with the cash flows and growth, which in turn implies PP conflicts in Asian markets. It is summarised that minority shareholders are at risk of being expropriated which suggests the urgent need for stronger investor protection in these markets to improve the attractiveness for investor performance.

Since the idea of dispersed ownership does not universally hold true, especially in emerging markets, Young et al.(2008) strongly affirm that PP conflicts is the major concern of corporate governance in emerging markets. The literature focusing on PP conflicts is developing (Chen & Young, 2010; Jiang & Peng, 2010; Su, et al., 2008) but the researchers assert that because of the unique nature of the PP problem, it has been ignored by mainstream agency theory research and more studies should address the problem stemming from large shareholders (S. J. Chang, 2003).

The current study accepts this challenge in addressing this unique yet crucial problem, using cross-country analysis of multiyear data for the five most active economies in East Asia. This will help to illuminate PP conflict issues with the potential for improving financial and economic outcomes in the region.

## **2.6 Agency theory: Dividend policy**

It is pertinent to all financial managers that dividend payments must be aligned with maximising shareholders' value. Therefore, the optimal dividend policy that is adopted by a company must reflect a "balance between current dividends and future growth, and maximises the company's share prices" (Brigham & Houston, 2010, p. 490). Dividend policy is also regarded as one of a long term financing strategies for company. This is because dividend policy is a company's plan that takes into account whether to pay out earnings as dividends as opposed to retaining them for reinvestment in the company (Hussainey, Mgbame & Chijoke-Mgbame, 2010).

Therefore, it is no surprise that companies' dividend policy become one of the most common subjects in finance literature from the 1950s (Lintner, 1956; Modigliani, 1982). It has also been related to many other corporate matters; from agency related issues to valuation of shares.

Before the famous Miller and Modigliani's (1961, hereafter M&M) seminal paper on dividend policy of irrelevance theory, the consensus belief among corporate members was that higher dividends lead to higher company's value. Retained earnings (a bird in the bush) which is payoff in the future is highly risky for the shareholders (might fly away) (Gordon and Shapiro, 1956; Gordon 1959; Lintner 1962; Walter 1963).

However, the dividend irrelevance hypothesis pioneered by M&M (1961) who state that under a strict set of assumptions of perfect market, they theorised that a company's value is determined only by its basic earning power and not on how its income is divided between dividends and retained earnings. They conjure that "...given a firm's investment policy, the dividend payout policy it chooses to follow will affect neither the current price of its shares nor the total returns to shareholders" (p.414).

M&M further attest all dividend policies implemented by any company are effectively similar to a shareholder, because the shareholder can create "homemade" dividends by adjusting his/her portfolio in a way that matches his/her preferences. Their assumptions of a perfect capital market for the dividend irrelevancy hypothesis can be summarised as follows: (1) no differences between

taxes on dividends and capital gains; (2) no transaction and flotation costs incurred when shares are traded; (3) all market participants have free and equal access to the same information and (4) no conflicts of interests between managers and shareholder (no agency problem/PA conflicts).

Nevertheless, due to the required assumptions about the nature of perfect capital market in M&M's dividend irrelevance hypothesis, empirical work testing the impact of dividend policy on the value of a company remains unsolved (Al-Malkawi, 2005). M&M's theory is greatly contested by his critics, and especially so when the hypothesis is bound with the stringent perfect market assumptions. Even if one of these assumptions is relaxed in a study, it can be change the whole concept altogether.

Most investors do have to pay tax for their dividend income and incur transactions costs when they sell their shares in the real world. Walter (1963) accounts this by stating that "...the cash-flow stream (both before and after account is taken of taxes imposed on recipients of dividends and capital gains) are conditioned by dividend policy" (p.290). Furthermore, Gordon (1963) and Lintner (1962) affirm that the required of return of a company will be reduced as a result of increased dividend payout, and inevitably will negatively affect the company's value. This is because eventually, the shareholders are less confident of gaining their capital gains back from reduced retained earnings (due to dividend payments).

Another important assumption of M&M's perfect capital market is that there are no conflicts of interest between managers and shareholders; and that shareholders

have perfect information of the market. Again, these assumptions may be quite impossible in the real world. As has been explained in Section 2.2, agency conflicts refer to the misalignment of objectives between the managers and the owners or shareholders of the company. Consequently, the shareholders will incur (agency) costs by monitoring the managers' actions. The payment of dividends might assist to bring into line the interests and mitigate the agency problems between managers and shareholders by reducing the free cash flows available for managers to spend unnecessarily (Rozeff, 1982; Easterbrook, 1984; Jensen, 1986).

Agency theory (PA conflict) also supports the notion of using dividends to limit the conflicts among the agents and principals by reducing the gap in information asymmetry or disequilibrium. Any payouts of dividends to shareholders convey credible inside information to the market which are usually private to the insiders (board of directors and management) (Bhattacharya, 1979; Miller & Rock, 1985). It is assumed that dividend payments require managers to participate in the capital market more frequently because cash dividends paid will use up company funds. Hence, any future investments will ensure managers supply as much information as possible to the shareholders in order to apply for more funds.

### ***2.6.1 Dividends as direct returns to shareholders***

This section describes how dividend payouts become one of the main sources of income for shareholders. This in turn eventually becomes a disadvantage to the other minority shareholders when the ownership of the company is concentrated to a single shareholder.

In reality, dividend payments is an unwritten contract between shareholders and corporate management (Myers, 1990). For companies, their after-tax earnings can basically be dealt with in two ways: dividends and retained earnings. Furthermore, a shareholder prefers a dividend despite the personal tax liability incurred from the dividend received (Frankfurter & Wood Jr., 2002).

Investors have two main expectations from the contractual basis of their investments which are returns through dividend distributions and capital appreciation upon selling their share investments. (Berle & Means, 1932, p. 247). Hence, the direct relationship between the shareholders and the company's resources takes the form of dividend payments, as in the 'a bird in hand hypothesis' (Gordon and Shapiro, 1956; Gordon 1959; Lintner 1962; Walter 1963).

In fact, Gordon (1959) claims that capital appreciation can be ignored in a prediction model because it is related to the future price based on the expected dividends and/or earnings. He also suggests that there are three possible hypotheses for why shareholders would own a share. The first reason is to obtain both dividends and earnings, second is to obtain dividends, and the third reason is to get the earnings. He examines four industries by analysing four industries (chemicals, foods, steels, and machine tools) from 1951 to 1954 in a simple linear regression model. He finds that dividends have more significant impact on share price than retained earnings which mean that shareholders do prefer dividend payouts.

In fact, Walter (1963) boldly claims that the satisfaction of an shareholder in owning any share “..is whole (or almost wholly) monetary in character” (p.281). Companies do regard paying out dividends as a cost which eventually will affect the share prices. He deduces that the net cash flows from companies’ operations are available for payment of debt and interests, capital expenditures and dividend payments.

How equity shareholders receive their returns can be shown in the following discounted cash flow (DCF): dividend and capital gains (Brigham & Ehrhardt, 2005, p. 317). In this model, the single way a shareholder may receive cash from the company is via dividend payment, hence capital gains is the change of the present value of expected future dividends (Bagwell & Shoven, 1989).

$$P_0 = \frac{D_1}{r_s - g}$$

Where  $P_0$  = current price of the ordinary share

$D_1$  = the expected dividend to be paid at Year 1

$r_s$  = the required rate of return

$g$  = growth of dividend

Dividend payments are also regarded as the cheapest way to the shareholders’ objective of having a stable flow of income from their capital investment (Allen & Michaely, 2002).

There have been mixed and inconclusive results even though many studies have looked into the issues of dividend policy. Most of these data also come from the

developed markets with little emphasis on emerging markets. In relation to this thesis, it builds upon the argument that in an M&A, dividends can prominently be measured to identify the existence of expropriation by large controlling shareholders.

### ***2.6.2 Dividends as proxy for PP conflicts***

The most prominent agency problem in East Asia is the expropriation of profit from large controlling shareholders as established in the literature (Bebchuk, Kraakman, & Triantis, 1999; Shleifer & Vishny, 1997) which typically reflects PP conflicts. As mentioned by Faccio et al., (2001 p.55) “dividends play a basic role in limiting insider expropriation because they remove corporate wealth from insider control”. In another statement, “dividends signal the severity of the conflicts between the large, controlling owner and small, outside shareholders” (Gugler & Yurtoglu, 2003, p. 733).

This thesis builds upon this research by relating dividends to large controlling shareholders. The next issue to address is whether lower or higher dividends explicate PP conflicts? Contradictory studies have been undertaken on higher or lower dividend payouts related to expropriation among large shareholders. It can be argued that the high concentration of shareholdings using direct and indirect voting rights may worsen the expropriation among minority shareholders especially during mergers and acquisitions.

Before the argument regarding higher or lower dividends and the link to expropriation can be considered, the reason why corporations pay dividends must

be understood. Why dividends are paid is always an intriguing quandary as suggested by many scholars including Renneboog and Trojanowski who state that “the controversy about why firms should pay dividends has not been satisfactorily resolved” (2007, p. 2).

The prominent paper by Lintner (1956) that features interviews with 28 selected US companies was the first study to investigate the answer to this quandary. The findings reveal that there are considerable differences amongst companies but also reiterate some significant similarities as pointed out by Marsh and Merton (1987):

1. Managers prefer to have a long-term target payout ratio and will avoid increasing the dividends unless the new level of payout can be sustained at least in the near future.
2. Changes in the companies’ dividends are usually triggered because of a major unexpected and persistent change in the earnings.

In short, Lintner concludes that dividends are sticky, tied to long-term sustainable earnings, paid by mature companies and often smoothed (consistent) from year to year.

In the PA context, dividends play a basic and important role in the reduction of agency cost. By paying out dividends, corporate earnings or free cash flows are returned to investors and are no longer available to management to benefit themselves (M. Jensen, 1986; Rozeff, 1982). Jensen and Meckling (1976) corroborate that managers are reluctant to pay out dividends for shareholders’

benefit, preferring to enjoy the corporation's income for their own perquisite consumption. This corresponds to the free cash flow theory developed by Easterbrook (1984) and discussed extensively in later work (Bena & Hanousek, 2008; Gugler & Yurtoglu, 2003).

Companies in the UK use dividends to maintain shareholder loyalty, supporting the free cash flow theory that the market is disciplining the managers (Dickerson, Gibson, & Tsakalotos, 1998). This is shown in a negative relationship with dividend payments to the probability of companies being taken over. The authors conclude that managers who are resistant to their companies being taken over because of fear being dismissed prefer to pay more dividends in order to satisfy their companies' shareholders. These shareholders would be reluctant to make any unnecessary drastic changes to their companies' portfolio when they are satisfied that their investments are well managed.

Dividend payout policy acts as a mechanism to interpret a company's recent performance and its future forecast, and availability of cash (Asquith & Mullins, 1983). A company's public announcement about dividend disbursements to shareholders helps to inform them about the company, unlike other announcements such as repurchases or share splits that may not show a clear picture about the company's cashflows and overall performance.

It has also been confirmed by Gugler & Yurtoglu (2003) in German companies that the dividend payout ratios can measure the severity of the conflicts between large and small shareholders. They predicted a U-shape relationship in which the

dividend ratios increase first with the largest shareholder and after 34.4% of voting share; the dividend ratio starts to fall. They explain that this might occur where at a level between 30% to 40% control of the largest shareholder, the benefit of having high payouts benefits all shareholders. However, as the holdings increase, the private benefit of control outweighs the benefit of having high payouts.

Studies in the developed market do not support that controlling shareholders expropriate company wealth. One of the earliest studies in the United States on this issue is by Zeckhauser and Pound (1990) who find no changes in payout ratios with the presence or absence of large shareholders, and that these controlling owners signal the market for better future performance. This notion is based on the idea that dividend payments signal a company's financial position and prospects to the market (Bhattacharya, 1979; Miller & Rock, 1985) which are in contrast to the theory to free cash flow of using dividend to return cashflow to shareholders.

It is also noted by Kumar (1988) that dividends are unable to completely signal any private information to shareholders, moreover, he shows that it is partially transmitted in equilibrium. He describes that given the conflicts of interest by the managers, any information about the company's investment prospect will be distorted to induce a more "suitable" reinvestment response from shareholders. Thus this reinforces why dividends are not suitable for explaining the PA context.

Dividends in the realm of agency theory explained above are developed for the benefit of dispersed ownership structures with managerial control. High shareholder protection in a capital market may also help to reduce minority expropriation. Australian companies frequently use the role of higher dividend (or debt) to control agency problems (Setia-Atmaja, Tanewski, & Skully, 2009).

Prominent studies have also shown that dividend matters in Asian companies. Investors in emerging markets are particularly concerned about large shareholders' controlling decisions on dividend policies where there is tendency for expropriation of cash holdings for their own private benefits (Chiou et al. 2010). This leads to the next issue of whether higher or lower dividends clarify expropriation.

Expropriation by controlling shareholders can be explicated through lower dividend payments. La Porta et al.(2000) argue that companies with weaker shareholder protection pay lower dividends. Large shareholders expropriate by paying out lower dividends to keep resources in the company and within their control (Easterbrook 1984; Faccio, et al., 2001; La Porta, et al., 2000a) and are likely to accumulate more cash within the company (Mancinelli & Ozkan 2006). Gugler and Yurtoglu (2003) assert that dividend payouts decrease with an increase in the control stake of the largest shareholder in Germany. Reasons for low payout to shareholders can be explained when the shareholders have the power to not pay out profits, but rather indulge in more private benefits of control (Maury & Pajuste, 2002).

At times, large shareholders may influence management decision making at the expense of the minority shareholders by paying out dividends for their personal advantage (Truong & Heaney, 2007). In their study of 8,279 companies in 37 countries around the world, they find that there is a convex relationship between the largest shareholding and dividend payout and support the notion of substitution theory where dividends reduce agency conflicts. The likelihood of paying dividends decreases at lower levels of shareholdings but start to increase when the largest shareholder holds equity approaching 30%. The researchers also conclude that dividends are higher / (lesser) in the countries practising civil law / (common law) due to the fact that common law countries have better legal protection. There is evidence of higher potential for conflicts among shareholders in Norway with more earnings paid out as dividends (Berzins, Bohren, & Stacescu, 2011).

In another study, Faccio et al. (2001) investigate the relationship between dividend payout and controlling shareholders in two regions; Western Europe and East Asia. They find that the presence of large shareholders in Western Europe helps to increase dividend rates, but large shareholders in Asian companies is associated with reduction in dividend payouts. The authors conclude that Asian large shareholders collude with the managers to expropriate minority shareholders by withholding cash flows with lower dividend payouts.

La Porta et al. (1998) also define the power exercised by shareholders (attached with each share) to enable them to vote for the directors who decide on all major corporate issues as one-share-one-vote. The researchers claim that dividends are

very much associated with these rights which enable them to disable managers from extracting cash flows off them from dividend payments (Grossman & Hart, 1988; Harris & Raviv, 1988).

It is argued that high levels of dividends paid to shareholders may also reduce the availability of funds for long-term investment which may negatively impact the company's long term performance (Bond & Meghir, 1994). La Porta et al. (2000) find that shareholders use their legal power to force management to pay out dividends when growth prospects are down. There is also evidence in the first study of PP conflicts in the Asean 4 market (excluding Singapore) by Banchit and Locke (2011) who use dividends as their proxy. They find that higher dividend payouts exist at levels of percentage for large shareholders at 5% and 10% stakes. They also find that the significantly negative relationship with companies' growth may indicate the presence of expropriation of cash resources. This affirms remarks by La Porta et al. (2000b) that when profits are not paid out to shareholders, some diversion of the profits may be used to invest in unprofitable projects.

It is also noted in corporate governance studies that companies with weaker governance tend to have high agency costs with increased likelihood of cash dividend distributions (John & Knyazeva, 2006). DeAngelo et al., (2004) conduct a study on 25 companies in the US by analysing the pattern of dividend payouts from 1973 to 2002. Historically, they imply that profitable companies associated with large agency problems are also likely to pay out more dividends.

Dividends have been demonstrated in previous studies as providing evidence of how controlling shareholders expropriate minority shareholders. High dividends reduce the value of the company (Lins, 2003) and thus negatively impact its growth. Alternatively, lower dividend payouts mean that large shareholders prefer to keep earnings within the company for their easy access to expropriate for their own private benefits (R. La Porta, et al., 2000a; Pinkowitz, Stulz, & Williamson, 2006). Discerning how both high and low dividends may reflect PP conflicts requires consideration of a range of other variables.

## **2.7 Agency theory: M&A**

Generally, M&A are defined as to “reflect various forms of combining companies thorough some mutuality of negotiations” (Weston, Weston, & Chung, 1998, p. 5). From a financial perspective, M&A rest within the framework of deterring the conflicts of interest that may impact the core element of maximisation of shareholders’ wealth (Sudarsanam, 2003).

M&A are also some of the main external market mechanisms to combat PA conflicts in a general merger strategy. Manne (1965), one of the earliest commentators on mergers states, "Only the takeover scheme provides some assurance of competitive efficiency among corporate managers and thereby affords strong protection to the interest of vast numbers of small, non-controlling shareholders" (p.113). M&As are considered to induce incentives because the market control of being taken over penalises poor-performing managers due to

inefficient behaviour that may lower a company's performance (Scharfstein, 1988).

Nevertheless, past studies have still not confirmed the effectiveness of M&A to reduce agency conflicts. In contrast to the view that M&A solve PA conflicts, the strategy is said to help manifest the agency problem. Mueller (1969) hypothesised that managers are motivated to increase the size of the company to better compensate themselves. Chevalier and Schaefer (1998) and Firth (1991) corroborate this notion when they report that companies in the UK and US engage in M&A actions because they want to increase company size, which later will lead to increased prestige and management compensation.

Furthermore, there seems to be no strong association with better performance for acquirers post M&A (Cong & Xie, 2009). While earlier studies conjecture positive returns post-M&A with increased company value (Lang & Stulz, 1994), recent research shows that acquirers actually lower the company's value after M&A (Moeller, Schlingemann, & Stulz, 2004).

Some studies claim that only target companies benefit from M&A, while the acquirers gain nothing or even suffer negative returns post acquisition (Bruner, 2002). His paper surveys evidence from 14 informal studies and 100 scientific studies from 1971 to 2001 and conclude that "target shareholders earn sizeable positive market-returns, and that bidders earn zero adjusted return, and bidders and targets combined earn positive adjusted returns" (Bruner, 2002, p. 48).

It is asserted that the overheads in M&A are so costly that they can outweigh the benefits. Grossman and Hart (1980) state that acquirer companies in M&A may have to pay an unexpected increase in profits to target company's shareholders or risk having them hold on to their shares, which inevitably become more expensive if the M&A materialises.

Many researchers agree that the non-valued added outcomes in M&As are mainly due to the conflicts between managers and owners (Ben-Amar & Andre, 2006; M. Jensen, 1986; M Jensen & Ruback, 1983), or agency problems. Nevertheless, empirical studies in event study of M&A continue to add to this already concentrated research area where most M&A studies are confined to the performance analyses (Rahman & Limmack 2000) and predicting M&A issues (Mat-Nor & Mohd Zin 1996).

### **2.7.1 M&A and concentrated ownership**

Shleifer and Vishny (1986) establish in their paper that large shareholders in an M&A reduce PA conflicts which will ultimately increase the company's value. Their sample for large shareholders consists of families on boards of directors, pension and profit-sharing plans, financial firms or investment funds. They find that large shareholders play an important task monitoring management regarding its capacity to initiate and complete an M&A. If conflicts with management occur, large shareholders can even invite and facilitate reliable third parties to bid for the company and later split their substantial gains with the bidder.

Many M&A related studies look at the impact of controlling shareholders by studying the performance after implementing M&A. In Canada, Ben-Amar and Andre (2006) find that the separation of ownership and control does not have any negative impact on corporate performance after takeover. However, when ownership is segmented to consider family controlled companies, then they find that positive returns are achieved instead.

Support for Ben Amar and Andre is found in the work of Yen and Andre (2007). They indicate that there is a non-linear relationship between concentrated ownership and post-acquisition performance over three years in the English-origin countries or in countries that have an English common law base. The study is based on a sample of 287 deals over the years of 1997 to 2001, and names eleven countries as English origin; Australia, Canada, India, Republic of Ireland, Israel, Malaysia, New Zealand, Singapore, South Africa, Thailand and the United Kingdom. They suggest that higher levels of ownership are associated with positive post-acquisition performance and decreasing agency costs. Nevertheless, they also note that separation of ownership and voting rights do lead to greater value destruction.

Expropriation by large shareholders has also been observed using performance analyses of M&A. Many studies have been done in European markets where ownership structure is more concentrated than in the UK and US (Faccio & Lang, 2002). Findings show mixed evidence of private benefits of control with weak minority shareholder protection. By defining expropriation as “the disproportional sharing of gains (or losses) among different shareholders”, Faccio & Stolin (2006,

p. 1416) study all acquisitions by European group-affiliated companies over the period 1997-2000 and they negate the hypothesis of expropriation. In this paper, the authors adopt ownership data compiled by Faccio and Lang (2002) and conclude that while there might be some presence of minority expropriation in Europe, M&As are not expected to be used as a devious mechanism by controlling shareholders.

More M&A studies done for Swedish (Holmen & Knopf, 2004) and Belgian companies (Buyschaert, et al., 2004) contradict the expropriation notion. The researchers argue that bidders with concentrated shareholder experience positive returns post M&A. They infer that the strong extra-legal institutions covering product markets, organised labour, press, tax compliance and social norm play an important role in mitigating the agency problem that could adversely affect company performance.

On the other hand, single country research by Bigelli and Mengoli (2004) on Italian acquisitions seems to support the expropriation hypothesis. They find consistent evidence of transfer of wealth from the minority shareholders to the controlling shareholders at the upper level of the pyramid through negative (positive) returns when companies buy lower (higher) companies within their pyramid. This means that controlling shareholders in Italian companies compel corporate control in order to increase their private benefits and not entirely for the benefit of increasing shareholder wealth. Barontini and Siciliano (2003) also find that Italian companies sustain lower Tobin's  $q$  suggesting higher risk of expropriation when the ultimate shareholder is either the state- or family-owned.

It is further reported in another study using Swedish companies, controlling shareholders escape the pressure of market control (M&A) by about 50% (Cronqvist & Nilsson, 2003) when compared to companies with dispersed ownership. In their study, the authors define controlling shareholders as “controlling minority shareholders” (CMS). Their main study however, was to analyse the effect of controlling shareholders on company value and they discover that Tobin’s  $q$  decreases with higher share percentage of controlling shareholdings. This position may allow the controlling shareholders to entrench themselves and expropriate the minority shareholders. The researchers claim that large shareholders favour private benefits instead of engaging in value-enhancing activities due to the minor impact they suffer upon negative corporate valuation results.

Countries with weak legal systems for protecting minority shareholders exacerbate a situation for higher expropriation in M&A (Bae, et al., 2002; Bigelli & Mengoli, 2004; Guan, 2005). Asian companies have been known to suffer from lack of protection for minority shareholders. Studies in Korea have discovered that when chaebols (business groups) make an acquisition, the acquirer’s share price drops but the controlling shareholders gain because of the increase in value of other firms (the acquired) in the group (Bae, et al., 2002). The tunnelling view championed by Johnson et al. (2000) is supported in their findings that hypothesise business groups involved M&A are less concerned about maximising shareholders’ wealth and more concerned about benefitting the controlling shareholders.

This can be a nuisance in Asia since empirical research has established the occurrences of expropriation among PP, unlike in developed markets. The divergence of interests between large shareholders and minority shareholders allows the former to extract private benefits by making suboptimal investment decisions, such as through diversification and/or M&A (Bigelli & Mengoli, 2004; Claessens, Djankov, Fan, & Lang, 1999). Controlling shareholders act in a self-interested manner by tunnelling corporate resources or paying higher premiums to gain a larger empire for more self-privilege actions (Johnson, La Porta, et al., 2000). As a result, higher premiums are paid out in mergers or takeovers and as argued by Sirower (1997) and Bruner (2002) destroy acquisition value.

Yen and Andre (2007), as noted above, include Malaysia and Thailand in their expropriation studies, but the majority of the countries studied were related to developed economies. These mature markets are likely to have better and sophisticated legal protection for minority shareholder. Questions covering expropriation by large shareholders in emerging markets remain ambiguous. Furthermore, performance studies may not be sufficient to explain PP conflicts especially in the context of expropriation. Hence, there is still a vacuum of research on expropriation by controlling shareholders utilising M&A in the Asian market. Empirical results regarding M&A in Southeast Asia remain scant and inconclusive mainly due to unavailability of long-term data (Kamaly, 2007; Wong & Cheung, 2009).

### ***2.7.2 M&A and PP conflicts***

As previously discussed, large shareholders are needed to monitor managers and to search for ways to increase company performance. Agency considerations are the most likely to answer the famous dividend puzzle (Black 1976); how companies choose their dividend policies (La Porta, et al., 2000b). From this perspective, large controlling shareholders are effectively monitored by minority shareholders through dividend payments.

Dividend payouts also act as an attraction to this type of clientele, or large shareholder. Dividends has also been mentioned to act as a monitoring mechanism to control any inappropriate activities by the managers or agent (M. Jensen & Meckling, 1976). Hence, high dividends are paid out to ensure the shareholders' perseverance and loyalty to the company (Allen & Bernardo, 2000).

Companies with concentrated ownership have to endure both agency problems; PA and PP conflicts. PP is aggravated when there is a lack of a regulatory system for protecting minority interests. Following La Porta et al. (1999) and Claessens et al. (1999), this thesis traces the ultimate ownership of the largest shareholders in order to provide a clearer picture of the impact of M&As by those who are in control. Using dividend as proxy for PP conflicts, the analyses in this research may gauge the extent of expropriation in Asian corporations.

Chapter one has also discussed of how acquirers do not create value but still M&As are being undertaken by companies worldwide, especially in recent years in Asean 5. However, is there a trade-off relationship between investment

(particularly in M&A) and dividend decisions? In perfect capital markets corporate investment and dividend decisions are not related to each other, according to Miller and Modigliani (1961). However, it is argued that the corporate markets in the real world have the presence of taxes, flotation cost and also agency costs that may have an impact on the investment decision (Asquith & Mullins, 1983). Results remain inconclusive; especially the fact that retained earnings should be accounted for only either for dividends to shareholders or for investment pursuits.

M&M (1961) propose that in a perfect capital market, investment decisions should not be affected by how an investment is being financed. This implies that shareholders' wealth is not affected by the financial decisions. Ultimately any dividend decisions must be independent of the investment decision and vice versa. Fama (1974) has verified this in his study by analysing 298 companies in the US from 1946 to 1968 where he finds that there is no evidence of dependency for dividends and internal investment decisions.

On the other hand, other empirical research contradicts M&M's (1961) theorem of independence between dividend and investment policies. Where there is asymmetric information, Leland & Pyle (1977) demonstrate in their paper that this will not be true in most cases. As discussed earlier, when a company suffers from agency conflicts, payout policy may provide an efficient partial remedy (Rozeff, 1982).

Dhrymes and Kurz (1967) note that earlier views relating to dividend being independent of investment policy, are at least true in the short run. They argue that

the dividend disbursements and investment outlays may be competing with the availability of resources in the company. Their analyses involve three-stage-least-square regression models that produce positive and significant coefficients when they introduce dividend and investment as explanatory variables in their model. This corresponds to their theory that by carrying out one activity may cause for a postponement/cancellation to another since dividend (investment) decisions affect investment (dividend) decisions. They note that a company will prefer the first course of action (low-dividends, high-investment) since long-term returns will decrease when dividends are increased at the expense of investment.

Smirlock and Marshall (1983) investigate causality tests of annual dividend payments and annual investment expenditure across firms in Standard and Poor's 400 share index and find there is no indication that investment decisions are affected by dividend decisions. On the other hand, Dickerson et al. (1998) suggest a trade-off between dividends and investment. They assert that an extra one pound given in dividends will be much more effective as a defence strategy against being taken over by other companies.

With the above argument, it can be suffice to support that dividends may be suitable to gauge the extent of expropriation in PP conflicts, especially in the context of an investment activity. In the presence of an active market for corporate control, as evident in Asean 5, it is suggested that companies are encouraged to raise dividends to maintain shareholder loyalty (Dickerson, et al., 1998). However, in the long run this may be detrimental to the minority shareholders and negatively affect company value in general. This thesis has also laid out the

notion that M&A is the best investment event that can be quantitatively measured as a single event as compared to other investment announcements (Amihud, et al., 1990).

### ***2.7.3 M&A performance and expropriation studies***

The concern over whether M&A is used as an expropriation strategy can be measured once the M&A is consummated. Past studies have looked at the overall performance studies to gauge the extent of expropriation as explained in Section 2.4.1. Analyses are done on performance returns by measuring the shareholders' wealth around the time scale or event window after an M&A announcement. Shareholders' wealth can either be in terms of abnormal share returns or using other accounting operating ratio such as returns on assets or Tobin's q.

There will be two types of time interval or event windows used in these performance studies: short-term and long-term. The short-term period used for valuation of abnormal share returns accounts for days before and after the M&A announcement. The event period in these types of studies includes periods between 1 to 6 days (Loderer & Martin, 1990) or 30 – 60 days (M Jensen & Ruback, 1983). The short-term event windows must be assessed in considerable detail if the time period is too short that real value of valuation effects may be eliminated. Furthermore, following an M&A announcement, most often other market news or industry related news will be announced which would contaminate the net effect of wealth gained (if any) from the proposed M&A. (Song, 2007a).

Long-term studies are then suggested by lengthening the time period to several years in order to allow for the capital market to adjust to the information and the realisation of (any) benefits (Sudarsanam, 2003). The event window can be from three, five or even seven years of study. Some examples of long-term studies' time periods are 23 to 36 months (Firth, 1991; Rahman & Limmack, 2004) or up to 70 months (Langetieg, 1978). However, the longer the time period, the greater the chances other events, such as strategic, financial or political will impact the valuation of returns.

Performance studies have their own limitation to be able to singularly conclude the extent of expropriation or PP conflicts. This is because the main issue of these studies is to measure the overall company returns, and not the conflicts per se. Some of the reasons benefitting controlling shareholders in performance studies include how companies have lower revenue, higher costs, or unproductive assets, which should lead to lower net income relative to assets after controlling for other factors including the ownership structure (Nagar, Petroni, & Wolfenzon, 2002).

Measures of performance have also been gauged in developed economies which may not be appropriate as far as Asean markets and developing economies are concerned. Authors in emerging market research have expressed their apprehension when using accounting measures as these are subject to manipulation by management and may be inaccurate (Wiwattanakantang, 2001). Another method of valuation for M&A is using pretax operating cash flow returns on assets as explained by Healy, Palepu and Ruback (1992, p. 139) that the proxy "represent actual economic benefits generated by the assets employed". The

M&A value of transaction is also included in the analysis (Banchit & Locke, 2011) or the transaction paid for M&A disclosed by the acquirer to the target companies.

In addition, accounting rules in accounting-based studies may distort the performance measurement and lead to a bias conclusion in M&A assessments (Sudarsanam, 2003) and as a whole, the notion of expropriation. Dividends paid out are reported in their real value. Furthermore, as suggested by La Porta et al. (2000) dividends are used as a mechanism to disgorge cash flow out of the company and for this matter may eliminate the issue of biasness in accounting reporting format. Besides, the amount of dividend paid by company reveals its operating cash flow circumstances (Miller & Rock, 1985).

There are also some limitations of concluding expropriation using performance measurement in market-based studies that include the need to have the exact date of an M&A announcement to measure the short-term period. As far as developing and Asian markets are concerned, this can be a challenge because often the information on companies planning to finalise an M&A may be leaked to some investors a long time ahead of the announcement date, sometimes up to three to four months earlier (Mat Nor & Mohd Zin, 1996). Furthermore, it is a challenge to ascertain whether the share prices reflect a true value of the company especially when it is pointed out by Khanna & Palepu (1997) that the emerging capital markets are illiquid and lack timely disclosure.

To reach any conclusion in any study, the differences or other variables that may impact the study must be considered. Fama and French (2001) suggest that bigger companies (total sales) with larger profitability (earnings or operating cash flows) and higher growth opportunities (sales growth) pay more dividends. Other variables that would have an impact on the measurement would be the sample size, country and industry differences, firm-specific effects and statistical methodology.

In the US market, Harris and Raviv (1988) and Stulz (1988) assert that controlling shareholders may utilise leverage to inflate the voting power of their shares which consequently may reduce the disciplinary role of the market for corporate control or takeover. These issues are important to lessen PA conflicts in the US and Europe, markets that have effective market control as compared to the Asian market. Companies with dispersed shareholders use debts and corporate control interchangeably to ensure that professional managers are duly maximising the investors' wealth.

Faccio, Lang and Young (2001a) find that unlike in Europe, companies in Asia use debt to fund projects with higher risks. Despite the ineffectiveness of capital markets in Asia, debts are utilised more than equity which may mean the potential of expropriation is greater there. These loans are given by "related parties" who share a controlling shareholder with the borrower. The controlling shareholders impose more power and control over the companies' resources. This also means that minority shareholders are at risk associated with high leverage problems such as higher costs of interests that may lead to the company facing financial distress

or bankruptcy (Fama & French 2001) and bigger gaps in information asymmetry due to assets being less tangible (Harris & Raviv 1988). Therefore, it is said that ineffectiveness of the Asian market helps to exacerbate PP conflicts and where the controlling shareholders may also dominate in policies involving leverage.

It is also reiterated that M&As provide a fast avenue to growth for a company. Mature markets associated with PA conflicts advocate that since company size is a function of managerial utility, the remuneration and private benefits that may be seized by managers may demonstrate that M&A may be an irresponsible act after all. In the context of the Asian market, the theory of PP conflicts holds true and must be further investigated using other alternative measure than the performance matrix that is often used such as Tobin's q or return on assets (ROE)..

Usually the acquirers own zero or very few shares in target firms before M&A take place (Betton, Eckbo, & Thorburn, 2009). However, some studies observe that there are cases in which the acquirer not only owns a sizeable share parcel in the target company prior to the bid but is also the controlling owner (Bae, et al., 2002; Croci & Petmezas, 2010; Holmen & Knopf, 2004). Croci and Petmezas note that minority shareholders in target companies in emerging markets gain significantly less than their counterparts in developed markets.

The controlling managers of the acquirer companies motivate the choice for method of payment used in M&A (Amihud, et al., 1990). This method will consist of either cash or shares. Agency theory suggests that managers of acquiring companies who have better information than the outside shareholders will prefer

financing by shares if they believe that the company's shares are overvalued, and use cash if they believe that their company's stock is undervalued (King, Dalton, Daily, & Covin, 2004; Myers & Majluf, 1984). Acquirers and target companies that have similar dividend policies are generally paid using shares (Jeon, Ligon, & Soranakom, 2010). Their studies find that target shareholders may discontinue with the merger when there is a difference of policies with the acquirer.

However, controlling shareholders of the acquiring companies may prefer to use cash instead of shares. This is true when PA studies find that managers with control rights prefer cash financing due to the fact that their ownership will be diluted after the merger and acquisition (Amihud, et al., 1990; Martin, 1996). When this occurs, cash will be depleted to finance the M&A. Dividend payout may show this association with the method of payment. As cash has been used to finance the investment, dividend payouts should be reduced.

The relatedness of acquired firms to the acquirers can be considered as another control element in M&A settings. Relatedness is defined by King et al. (2004) as 'similarity in terms of resources or product-market similarity'. Palich, Cardinal, and Miller (2000) indicate that the relationship between company performance and relatedness is curvilinear; whereby performance increases as unrelated-business diverse or change to related-business, but performance declines as related business companies diverse to unrelated-business (p.155).

Another variable that has an impact on M&A performance is the acquirer's experience. Haleblian and Finkelstein (1999) find that past acquisition experience

shows a U-shaped relationship between acquisition experience and M&A performance. This means that as companies gain more experience in making acquisitions, any negative relationship between acquisition experience and performance will be corrected with subsequent M&A undertakings.

## **2.8 Summary**

This chapter examined existing literature pertaining to the relationship between PP conflicts and large controlling shareholders, and also identified the contribution to be endeavoured in this research. This review critically evaluates how the central issue in Asian capital markets is PP conflicts as opposed to the generally common PA conflicts in mature markets. Another stem of research that is important to be understood is the extent of PP conflicts associated with M&A.

The main research problem of this study is investigating PP conflicts associated with M&A in Asean 5. It has been explained that PP conflicts seem to be extensive, if not unique in Asian capital markets. While there have been a growing number of studies on PP conflicts, no research has addressed M&A in Asean 5. The topic is concerning and interesting in the Asian context especially when the number of M&As has been dramatically and continuously increasing in the Asean 5 throughout the last decade (Metwalli & Tang, 2009).

Controlling shareholders deciding to engage in M&A investment can be potentially another avenue for how the burgeoning PP conflicts in this region can be exacerbated. Chapter 3 provides an overview of the institutional background

of capital markets in Asean 5; Indonesia, Malaysia, Singapore, Thailand and Philippines. A summary of the capital framework and M&A regulations is tabled to understand the roles of various organisations in each country that may influence the regulatory protection standard of minority shareholders in Asia.

## **CHAPTER 3: INSTITUTIONAL BACKGROUND**

### **3.1 Introduction**

This chapter discusses the overview of the Asean 5 equity markets and the general framework of regulations that govern M&A activities. Some of the characteristics and ownership shareholdings of each of these countries are also discussed.

The region of Association of Southeast Asian Nation (ASEAN) encompasses of ten countries with a combined population over 600 million people. However, about 90% of the total gross domestic product (GDP) value (USD2 trillion) reported in 2012, are accounted by the original five countries of ASEAN (ASEAN Exchanges, 2012). The unique feature of Asean 5 collaboration that continuously attracts investors is that the scope and diversity of different levels of capital markets its offering, from the frontier market like Thailand to developed market like Singapore.

### **3.2 Brief overview of Asean 5 Capital Markets**

#### ***3.2.1 Indonesia Stock Exchange (IDX)***

The Indonesian capital market (formally known as Jakarta Stock Exchange) was formed in 1912, existing even before Indonesia's independence in 1949 under the colonisation of the Dutch East Indies. The capital market was dormant in certain periods, including during World Wars I and II. In 1977, it was reactivated by the Indonesian Government with only 24 companies listed. The opening of its capital

market to foreign investors in 1987 has improved the capital market since. The merger of the Jakarta Stock Exchange and Surabaya Stock Exchange in 2007 formed the Indonesian Stock Exchange (IDX). As at 31 December 2010 the numbers of public listed companies was about 400 with USD361.2 million in market capitalisation.

### **3.2.2 *Bursa Malaysia (BM)***

The capital market in Malaysia was first formalised in 1930 with the establishment of the Singapore Stockbroker's Association and re-registered as the Malayan Stockbroker's Association in 1937. It then re-established as the Malayan Stock Exchange in 1960 where public trading of shares began. It changed its name again in 1964 as the Stock Exchange of Malaysia. It was later known as the Stock Exchange of Malaysia and Singapore in 1965 with the secession of Singapore from Malaysia. When the currency interchangeability between Malaysia and Singapore ceased in 1973, it was known as the Kuala Lumpur Stock Exchange while Singapore had its own Stock Exchange of Singapore (SES). And finally, in 2004 the current name of Bursa Malaysia was incorporated. As at 31 December 2010 there were about 950 listed companies and USD395 million in market capitalisation (Securities Commission Malaysia, 2011).

### **3.2.3 *The Philippine Stocks Exchange (PSE)***

The Manila Stock Exchange was formed in 1927 and after three decades of existence, the two bourses including the Makati Stock Exchange (1963) were merged into the Philippines Stock Exchange (PSE). As of 31 December 2010, the

Philippine Stock Exchange had over 250 listed companies with a total market capitalisation of USD202 million.

#### ***3.2.4 The Singapore Stock Exchange (SGX)***

The currency interchange ability between Singapore and Malaysia in 1973 saw the birth of its own Stock Exchange of Singapore after a long history of collaboration from 1930. SGX was created in 1999 when the Stock Exchange of Singapore (SES) and the Singapore International Monetary Exchange (SIMEX) merged into one and since then SGX has been a leading financial centre in the Asia-Pacific region. SEC is divided into the SGX main board and the SGX SESDAQ (newer companies with no quantitative requirements for listing). As of 17 December 2010, SGX had over 778 listed companies with a combined market capitalisation of USD\$646 million (Central Intelligence Agency, 2011; Monetary Authority Singapore)

#### ***3.2.5 The Stock Exchange of Thailand (SET)***

The inception of the Thailand stock market began in 1962 as a limited partnership and became a limited company and changed its name to the Bangkok Stock Exchange Co Ltd (BSE) in 1963. The early years of Thailand's capital market was regarded as a failure due to lack of official government support and limited investor understanding of the equity market. Despite that, the Thai government soon realised the importance of an efficient capital market for the economic growth of its nation. After several amendments to securities exchange legislation the Securities Exchange of Thailand was enacted in 1975. Its name was formally changed to the Stock Exchange of Thailand (SET) in 1991. As of 31 December

2009, the Stock Exchange of Thailand had over 570 listed companies with a combined market capitalization of USD264.73 million (Nangseuphim, 2010).

### **3.3 Regulatory Framework of Mergers and Acquisitions**

#### **3.3.1 Introduction**

Table 4 displays the summary of the capital framework, M&A general guidelines and the basic shareholder protection of countries in Asean 5. Each country has its own company laws and enactments that govern the acquisition by/of public listed companies.

#### **3.3.2 Indonesia**

There are four types of M&A transactions defined as M&A in Indonesia: mergers, consolidations, share acquisitions and asset acquisitions. There are two types of offer; mandatory offer and voluntary offer. In a mandatory offer, the acquirer is entitled to exercise control or meets certain takeover thresholds. A voluntary offer means that the takeover is not a mandatory offer.

M&A of public companies in Indonesia are governed with the general requirements of Indonesia's Capital Markets law, Financial Institutions Supervisory Board (Bapepam-LK) and Indonesia's stock exchanges. The stock exchange is generally concerned with the procedure that involves listing of shares following a business combination. Apart from that, if any foreign investment element is involved further approval needs to be sought from the Capital Investment Coordinating Board (BKPM).

Bapepam-LK's role is to ensure that any merger or consolidation statement that is being submitted by the board of directors and board of commissioners of a public company is accessed with due 'attention to the interest of the company, the public and fair competition'. Under the Bapepam Regulation IX.H.1, the acquirer of a public company is obligated to keep the company, Bapepam-LK, the relevant stock exchanges and the public fully informed on the progress in negotiations to acquire a company.

Any change in the company's ownership that involves holding at least 5 % of the shares of a public company is required to be reported to Bapepam-LK. Duties of controlling shareholders are quite general in the sense that their "general principle is a business combination must not be detrimental to the interests of the company, minority shareholders, employees... or to the need to maintain fair business competition". It is also interesting to note that these mergers, consolidations or acquisitions "are normally initiated by the controlling shareholders of the companies involved" (Suhardiman, Mohamad Kadri, & Johnson, 2008, p. 145).

In Indonesia, the controller of a public listed company as defined by the chairman of Bapepam-LK is when the party owns 25% or more of the equity. This is enough to constitute a mandatory offer. With effect from 30 June 2008, this threshold was increased to 50% or more. (Bagwell & Shoven, 1989; Hadiputranto Hadinoto & Partners, 2005).

### 3.3.3 *Malaysia*

The main regulatory bodies that govern the public takeovers and mergers in Malaysia are the Securities Commission Companies Commission, Bursa Malaysia Securities Berhad (Bursa Malaysia) and Malaysian Central Bank. These bodies review the following regulations in Malaysia's M&A.

- i) The Malaysian Code on Take-Overs and Mergers 1998 (revised to The Malaysian Code on Take-Overs and Mergers 2010 (Code)). This Code governs the conduct of all persons involved in takeover offers and mergers in Malaysia.
- ii) Capital Market and Services Act 2007 (CMSA) contains provisions for regulating the activities of markets and intermediaries in the Malaysian capital market, shareholding requirements and insider trading.
- iii) Companies Act that contains provisions that govern the conduct and affairs of companies that include the directors' duties and declarations of substantial shareholdings and scheme or arrangements.
- iv) Bursa Malaysia Listing Requirements oversees whether companies comply with the Listing Requirements if they are listed in the Bursa Malaysia Stock Exchange.

In Malaysia, the main means of controlling a public company can be categorised into a few main methods. They are:

- i) Takeover offer: this is where the shareholders of the target company are asked to accept an offer that has been made by a bidder. A mandatory offer happens when the bidder or acquirer holds or

exercises control of more than 33% or more of the target's voting shares.

- ii) Scheme of arrangement: this is when the company enters into collaboration with the acquirer for them to take over the target companies. The target's shareholders will then vote on a takeover proposal to put them in mutual agreement with the collaborating parties/acquirers. The target's assets and shares are transferred to the acquirer.
- iii) Acquisition of assets and liabilities: this is when the target sells its assets and liabilities to the bidder through an ordinary resolution by the target's shareholders (requiring an approval of 50% and above). In 2011, the 50% vote was revised to 75%.

Where foreign ownership of shares is concerned, the Code has no distinction for the treatment of local or foreign bidders. (Wong & Partners, 2005)

#### **3.3.4 Singapore**

The takeover activities in Singapore are regulated by the Monetary Authority of Singapore (MAS), the Securities Industry Council (the Council) and the Securities and Exchange Act (SEA). The Council regulates the Singapore Code on Take-Overs and Mergers to oversee M&A activities in Singapore. Its primary objective is to ensure fair and equal treatment of all shareholders in a take-over or merger situation of public listed companies in Singapore.

Three main takeover methods are applied in Singapore; share acquisition, merger, and asset acquisition. In 1999, the Code has the following definitions for a mandatory bid threshold.

...any person acquiring shares which carry 25% or more of the voting rights of the company. The Companies Act of Singapore also defines “acquiring effective control” as the acquiring of shares carrying 25% or more of the voting rights, which triggers a bid obligation (Brigham & Ehrhardt, 2005, p. 12).

In 2005, the mandatory threshold of 25 % was revised to 30 % or more of the voting rights. (Baker & McKenzie Wong & Leow, 2005; Brigham & Ehrhardt, 2005).

### ***3.3.5 Philippines***

The M&A transactions in the Philippines are governed by the provisions of the Corporation Code, the Securities Regulation Code (SRC) and the Civil Code. Generally, it does not have specific M&A legislation like Malaysia and Singapore.

Acquisitions are the most popular means of M&A in Philippines where they are done either with full or partial acquisitions of shares or assets of the target companies. Philippines recognise a merger when a surviving company absorbs a target company. While in consolidation, two or more companies consolidate to form a new corporation. (Safieddine, 2009, p. 1). The mandatory threshold according to SRC is when the purchaser (bidder) intends to acquire 35% or more

of the equity shares. M&As for foreign investors in Philippines are governed by the Foreign Investments Act.

### ***3.3.6 Thailand***

M&A of public companies in Thailand are governed by the Securities and Exchange Act (SEC Act) and the Public Limited Company Act (PLCA), Stock Exchange of Thailand (SET) and The Securities Exchange Commission (SEC) .

There are three main forms of M&A in Thailand which are

- i) an amalgamation or consolidation,
- ii) an acquisition of shares in a target company,
- iii) an acquisition of assets of the target company

(Baker & McKenzie Ltd., 2005, p. 1)

The threshold or trigger point as it is called in Thailand is set at 25% or more acquisition of issued shares. There are a number of complex restrictions for M&A with foreign investors. They must abide by the Foreign Business Act (1999) that spells out various rules and restrictions as it is considered by the Thai Government that Thais are not ready to face foreign competition (Baker & McKenzie Ltd., 2005). However, approval from the Director-General of the Department of Commercial Registration in the Ministry of Commerce may approve up to 100% foreign ownership (Baker & McKenzie, n.d.; F. Khan).

### **3.4 Shareholder Protection**

It is imperative in every country to have solid protection rights for investors. This is not only important to ensure that investor rights are protected from managers or controlling shareholders, it is also important to help induce the development of capital markets.

La Porta, Lopez-de-Silanes, & Shleifer (1998) examine legal rules of corporate shareholders of 49 countries, and emphasise that common-law countries (such as Malaysia and Singapore) generally have better investors' protection than civil law rules. For instance, French civil-law (e.g. Indonesia and Philippines) seems to offer the weakest legal protection among the other types of civil laws (e.g. German and Scandinavian civil law). However, in terms of law enforcement, the best would be German civil law and Scandinavian countries.

As can be seen in Table 4, Malaysia and Singapore are under common law so it is not surprising that M&A are most active in these two countries, as explained in Section 1.3. Furthermore as explained in Sections 3.3.3 and 3.3.4, both countries have special M&A regulations; Singapore has its own Singapore Code on Takeovers and Mergers (incorporated in 1974 (reviewed 1999)) and Malaysia has its Panel on Take-overs and Mergers (incorporated 1998).

For anti-director rights, La Porta et.al. (1998, pp. 1127-1128) measure how strong the legal system is in protecting minority shareholders from control in the hands of concentrated shareholders and managers. These measures include ability for

shareholders to vote via mail, pre-emptive rights for minority shareholders to buy new issues of shares and cumulative power to vote for board members. The country is given 1 for existence of protection and 0 if otherwise, whereby the score is added up to 5. As shown in Table 4, again Singapore and Malaysia top the score at 4; Philippines scores 3 while Indonesia and Thailand have a low score of 2.

Mandatory dividend is not part of Asean 5 law which means that corporations there are not liable to pay out any fraction of their declared earnings as dividends to shareholders (Chaw & Susela, 2009). Countries<sup>4</sup> that mandate dividend payouts are mostly found to pay higher than countries that have no mandatory law for dividend payouts. The mandatory act of paying actually helps to reassure minority shareholders that they are not being expropriated entirely by the controlling parties and also encourages higher participation in the equity markets (La Porta, et al., 2000a).

Countries that have a one-share-one-vote rule for their public listed companies are better at protecting their shareholders. It is contended that insiders or managers who own a relative amount of shares may not have control over the companies' cash flow when this rule is in place, which is a substitution for the dividend right of every other shareholder (Grossman & Hart, 1988; Harris & Raviv, 1988). Only Singapore and Malaysia have the rule in their regulations. However, a strand of research does conclude that mandating one-share-one-vote may not protect minority shareholders as efficiently as it should (Burkart & Lee, 2008) since

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<sup>4</sup> Countries included are Brazil, Chile, Colombia, Greece and Venezuela (La Porta, et al., 2000a)

companies may resort to other alternatives to expropriate, via pyramiding or cross-ownership (Bebchuk, et al., 1999). It is shown that East Asian corporations are utilising these methods of pyramiding and cross-ownerships to concentrate more control (Claessens, et al., 2000b).

On the other hand, this thesis is limited to using the ultimate percentage of shareholders. East Asian companies have no significant deviations from one-share-one-vote rule through to shares with different voting rights as investigated by Claessens et al. (2000a). They show that multiple methods used to enhance control in East Asian companies using, for example, multiple classes of voting rights, pyramid structures, crossholdings, have no significant impact on the final voting rights attached to the shareholders' shares.

## **3.5 Dividend policy in Asean 5**

### ***3.5.1 Introduction***

Dividend ratio is established in this thesis as the core proxy for PP conflicts. Therefore, it is imperative to discuss the highlights of dividend policy being practised in these five countries. In a nutshell, these countries do not impose a mandatory law for paying out dividends from the companies.

### ***3.5.2 Indonesia***

The Company Law of Indonesia contains the distribution of dividends in Part 3 (Article 70) that “all net earnings after deduction for reserve fund shall be distributed to the shareholders as dividend, except other provided in the General

Meeting of Shareholders dividend can only be distributed if the company possesses a positive profit balance” (“Law on Limited Liability Company,” 2007, p. 29). This is as stipulated in Chapter 1 (Article 1) where General Meeting of Shareholders means shareholders that have authority not given to the board of directors.

### **3.5.3 Malaysia**

Companies Act 1965 in Section 365(1) reads, “ No dividends shall be payable to shareholders of any company except out of profits or pursuant to Section 60.” (“Company Act,” 1965). Section 60 relates to the application of the monies in the share premium account. Given that Section 60 does not include payment of cash dividend, a company may only give it out of its profits.

Because the term profits has not been defined in the Act, according to a jurisdiction by Spanish Prospecting Co. Ltd (1911), ‘profits’ implies the fundamental meaning which is the amount of gain made by the business during the year (Chan & Devi, 2009).

### **3.5.4 Philippines**

The law that regards dividend payments in Singapore is found in Section 43 of The Corporation Code of the Philippines (1980) statute that states:

“The board of directors of a stock corporation may declare dividends out of the unrestricted retained earnings which shall be payable in cash, in

property, or in stock to all stockholders on the basis of outstanding stock held by them.”(“The Corporation Code of the Philippines,” 1980, p. 20).

This statute does not mandate the companies to pay out dividends to the shareholders but it is noted by Salonga (2003) that historically the principal function of the dividend statutes is to preserve a ‘quantitative minimum of assets’ to protect creditors.

### ***3.5.5 Singapore***

In Singapore, the same rule applies for payment of dividends that states companies may pay dividends only out of profits. This is contained in Section 403(1) of the Companies Act. The term “profits” is also not defined in the Act which means that there is no limit to what the maximum permissible dividend fund can be allocated by the companies (Yeo, Lee, Hanrahan, Ramsay, & Stapledon, 2008).

### ***3.5.6 Thailand***

The Public Limited Company Act of Thailand states in Chapter 7 (Section 108) that: “No dividend shall be paid out of funds other than profit. In the case where the company still sustains an accumulated loss, no dividend shall be paid.”(“Public Limited Company Act B.E.2535,” B.E.2535, p. 11)

### **3.6 Summary**

M&A activities become phenomenal especially in the 2000s and still a growing trend that calls for stronger legislation for shareholder protection. Special M&A regulations are available for two countries: Malaysia and Singapore while the other three countries have common authorities to monitor its countries M&A activities. Mandatory dividend is not part of Asean 5 law which means that corporations there are not liable to pay out any fraction of their declared earnings as dividends to shareholders. Table 4 shows the summary of capital framework, M&A regulations and shareholder protection development of the M&A market in Asean 5 from the 1980s to 2010 explained earlier.

Table 4: Summary of capital framework, M&A regulations and shareholder protection

Capital Framework	Indonesia	Malaysia	Singapore	Thailand	Philippines
Legal system	Civil law	Common Law	Common Law	Civil Law	Civil law
Parliament Act governing companies	The Company Law, Capital Markets Law, M&A Regulation (1998)	Companies Act 1965, Security Industry Act 1983 and Securities Commission Act 1993	Companies (Amendment) Act 2005, Securities and Futures Act,	Securities and Exchange Act 1992 (SEA), Public Limited Company Act (1992), Foreign Business Act (1999)	Corporation Code, Civil Code and the Securities Regulation Code (SRC), The Foreign Investments Act
Regulatory authorities of companies	Indonesian Capital Market and Financial Supervisory Board (Bapepam-LK), Capital Investment Coordination Board (BKPM), Indonesia Stock Exchange	Companies Commission of Malaysia (CCM) The Bursa Malaysia Securities Commission (SC).	Securities Industry Council (Council), Singapore Stock Exchange (SSE)	Stock Exchange of Thailand (SET), Securities and Exchange Commission (SEC)	Philippines Stock Exchange (PEC)
Special M&A regulators	None	Panel on Take-overs and Mergers (the Panel), Malaysian Code on Take-overs and Mergers, 1998. (The Code)	Singapore Code on Take-overs and Mergers (The Singapore Code), Monetary Authority of Singapore (MAS)	None	None
Types of transaction	Mergers, consolidation: share acquisitions, asset acquisitions	Mergers, consolidation: share acquisitions, asset acquisitions	Merger, amalgamation, takeover: share transactions, asset transactions	Amalgamation, consolidation, share acquisition, assets acquisitions.	Mergers, consolidation: share acquisitions, asset acquisitions
Takeover threshold	25 % of more of the voting rights.	33 % or more of the voting rights.	30 % or more of the voting rights.	25 % of more of the voting rights.	35 % or more of the voting rights.
<b>Shareholder Protection</b> (R. La Porta, et al., 1998)					
One-share – One vote	No	Yes	Yes	No	No
Anti-director rights (out of 5)	2	4	4	2	3
Mandatory dividend	No	No	No	No	No
Minority shareholder	Shareholders which represent at least 10 % of the total numbers with valid voting rights.	Establishment of Malaysian Institute of Corporate Governance (1998) Minority Shareholder Watchdog Group Limited (2000) Shareholders which represent at least 10 % of the total numbers with valid voting rights	Shareholders which represent at least 10 % of the total numbers with valid voting rights.	Shareholders which represent at least 10 % of the total numbers with valid voting rights.	Shareholders which represent at least 10 % of the total numbers with valid voting rights.

## **CHAPTER 4: HYPOTHESES AND EMPIRICAL MODEL DEVELOPMENT**

### **4.1 Introduction**

The previous three chapters have laid out the research objectives as well as the theoretical framework on PP and PA conflicts, and their relationships with M&A. Key institutional characteristics of Asean 5 capital markets and M&A regulations were also discussed. This chapter discusses the formulation of hypotheses from the previous chapters in order to develop the model for empirical analysis. In this study, PP conflicts are considered from two perspectives – using dividend ratios and performance based proxy (Tobin's q), while PA conflicts using efficiency ratio.

PP conflicts can be dealt in an expropriation context by measuring conflicts using the performance based method (Chen & Young, 2010). It is propositioned that PP agency increases when companies are underperforming with increased concentration of ownership. Dividend ratios are claimed to be another way to measure the outcome of these conflicts in Asean 5 countries. Dividend is taken as proxy for PP conflicts and M&A issues. This is because not only is the information on dividend ratios readily available, but these payouts can determine the severity of conflicts when large shareholders are in control of company profits (Bebchuk, et al., 1999; Gugler & Yurtoglu, 2003).

Another key assumption of PP conflict is that managers are the agents for the controlling shareholders. Hence, PA conflicts are also measured with asset utilisation ratio as the proxy. In terms of the explanatory attributes, the study uses large controlling shareholder (continuous and interval data) and other firm-specific characteristics (leverage, performance, etc.). For M&A attributes, variables (effective date of M&A, method of payment, etc) have also been considered to address the main issue of PP conflicts associated with M&A in Asean 5 countries.

This chapter is structured as follows. Section 4.2 presents the theoretical framework of this study, Section 4.3 deals with the testable hypotheses development of the current study and Section 4.4 concludes the chapter.

## **4.2 Theoretical framework**

Figure 5 presents the theoretical framework for this thesis. On the left hand side are the company specific variables, which previous studies have indicated to be important in terms of impacting the right hand side. The dashed arrow depicts the relationship between the controlling shareholders to the agency conflicts.

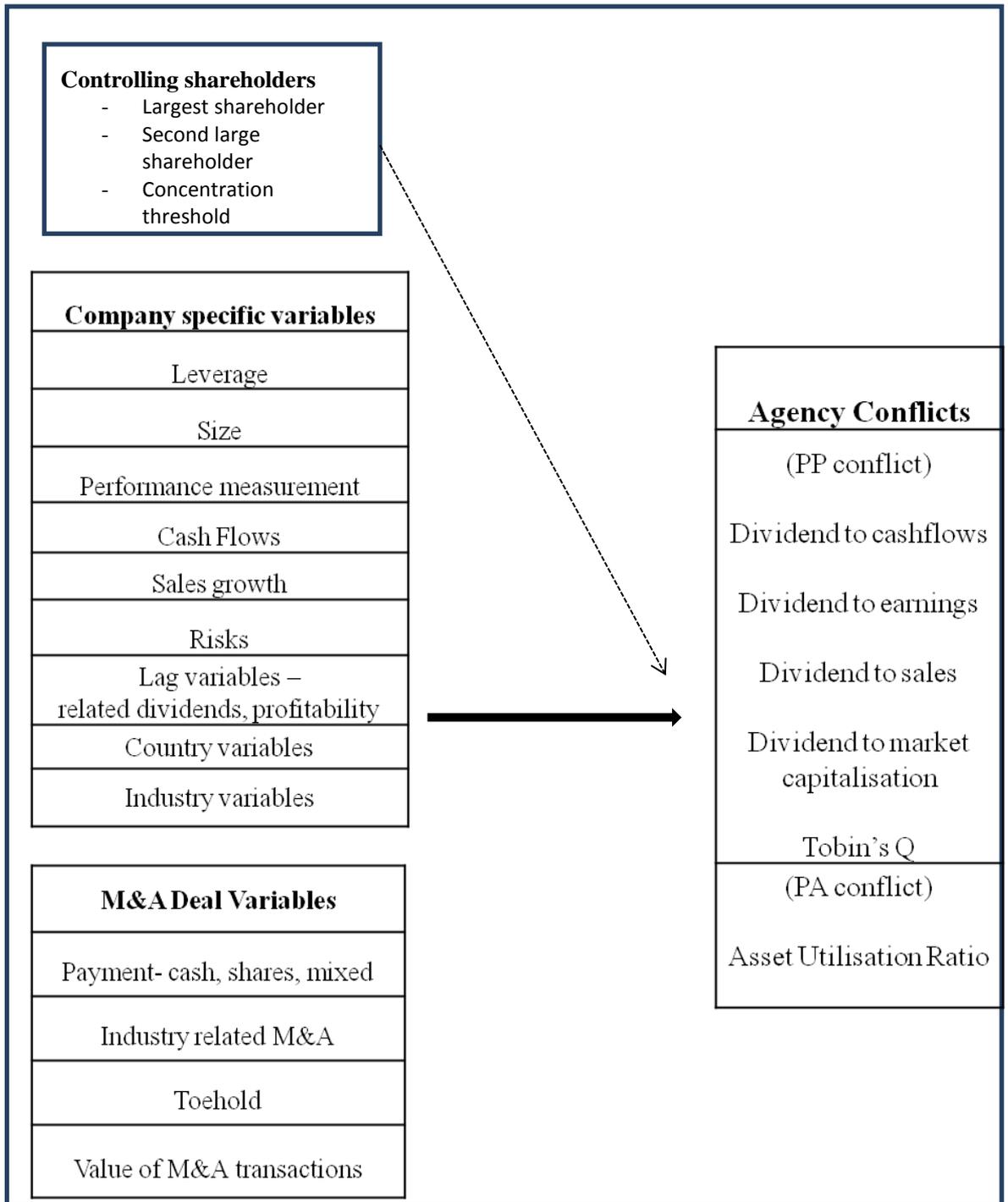
Other control variables are namely the companies' lag (t-1) of dependent variables, leverage, company size, performance measurement, sales growth, risks, industry and country variables. These are linked to the proxies for PP conflicts on the right hand side measured by dividend to cash flow, dividend to earnings, dividend to sales and dividend to market capitalisation (Faccio, et al., 2001b).

Since many studies have used performance based measurement as a proxy for expropriation, Tobin's q is also taken into account for the robustness test. The asset utilisation ratio to indicate PA conflicts is included to ascertain if the relationship is significant in Asean 5.

This study contributes to the investigation of PP conflicts by linking the relationship between the company characteristics and M&A variables which are indicated by the payment methods, industry relatedness with the acquirers and target companies and the value of M&A transactions. Control variables for M&A have also been identified to be growth, size, leverage and liquidity (Dickerson, et al., 1998).

### **4.3 Method of analysis and hypotheses testing**

Based on the literature reviewed, hypotheses are formed and discussed next. To achieve the research objectives, the methods of analysis and expected signs in the empirical analysis are highlighted herewith. Following the framework in Figure 5, the hypotheses are formulated in three main categories. These investigations consist of the categories from the perspective of PP conflicts between concentrated ownership, firm-specific variables and M&A variables.



*Figure 5* : Theoretical framework for Principal-Principal (PP) conflicts associated with mergers and acquisitions (M&A) in Asean 5

### ***4.3.1 Ownership and PP conflicts***

#### ***4.3.1.1 Hypothesis 1***

This research supports the notion that large controlling shareholders divert resources away from the minority shareholders in their investment strategy (Shleifer & Vishny, 1997) by incorporating M&A which usually affects the overall performance of the company. It is also suggested that dividend ratios as a direct return to shareholders are one of the most justifiable measurements to assess the extent of expropriation (Faccio, et al., 2001b; La Porta, et al., 2000a) and in this context, called PP conflicts. Many companies in countries such as those in East Asia have weaker regulation for shareholders' protection and pay out lower dividends by keeping resources in the company to extract more private benefits for the controlling owners (Faccio, et al., 2001b; La Porta, et al., 2000b). This current research suggests that in the context of post-M&A in Asean 5, expropriation may be manifested through increased dividend payments.

In China, Lee and Xiao (2002) observe that companies with large shareholder concentration may expropriate minority shareholders in the form of cash dividend payout. Dividend payment is regarded as an avenue for the controlling shareholders to extract resources away from the company (Easterbrook 1984; Faccio et al., 2001; La Porta et al., 2000) for their own private benefits (Chiou et al., 2010). Recently, Banchit and Locke (2011) note that PP conflicts do exist in Asean 4 (Indonesia, Malaysia, Thailand and Philippines) markets through higher payment of cash dividends.

In mature markets where dispersed ownership prevails, dividend payment is utilised to monitor managers' actions and reduce PA costs (Allen & Bernardo, 2000; Grossman & Hart, 1988; Harris & Raviv, 1988; La Porta, et al., 2000b). On the other hand, in the context of concentrated ownership among few shareholders and lack of shareholders' legal protection, the payment of dividends may indicate the presence of expropriation between shareholders (Claessens, Djankov, & Lang, 1999b).

The net effect of a conflict may be distinguished from the effect of a single investment project as in the case of corporate M&A where public information must be made available to shareholders (Amihud, et al., 1990). M&A as an investment for the acquiring companies are viewed in research as a substitute between dividend disbursements as both outlays, investment and dividends may be competing with the availability of resources in the company (Dhrymes & Kurz, 1967). In order to achieve the first research question that states do dividend payouts change after M&A in Asean 5, the following hypotheses are stipulated and tested using the paired-sample t test. For Hypothesis 1, it is hypothesised that there will be lower dividend payouts before M&A and increased payouts after M&A.

***H1a: Acquiring companies' dividend is lower before M&A***

***H1b: Acquiring companies' dividend is higher after M&A***

#### **4.3.1.2 Hypothesis 2a**

Prior empirical studies deduce that in markets with concentrated ownership such as in South East Asia, the main agency problem may be between the controlling shareholders and the minority shareholders (Claessens, et al., 2002; Johnson, Boone, et al., 2000). Controlling shareholders there dominate board members and managers to expropriate company resources for their private benefits (Faccio, et al., 2001b) and high dividend disbursements may be one of the ways this may be revealed and ultimately measured (Chiou, Chen, & Huang, 2010; Faccio, et al., 2001b; C. Maury & Pajuste, 2002).

Companies in certain countries have been found to pay higher dividends to suggest higher potential of conflicts between shareholders (Berzins, et al., 2011). It has also been discussed that since large controlling shareholders in Asia have a direct managerial role, including making M&A decisions for their companies, it is anticipated that a significant relationship between large shareholders and dividend payments may indicate PP conflicts. To answer the second research question whether large shareholders exacerbate PP conflicts, the second hypothesis states that there will be a positive relationship between dividend payment and largest shareholders associated with M&A.

***H2a: There is a positive relationship between the largest shareholders and PP conflicts (dividend) associated with M&A.***

#### **4.3.1.3 Hypothesis 2b**

Because many past studies have used performance measurement to proxy for expropriation from large shareholders, this study incorporates Tobin's q as a robust measure of PP conflicts. Doukas, Kim, & Pantzalis (2000) explain that poorly managed companies in the US are more likely to be exposed to higher agency costs than well-managed companies. This is a consequence of a company performing below market value being more likely to waste its free cash flows on non-positive net-present value projects. It is anticipated for the next hypothesis that there is a negative relationship between company performance (Tobin's q) and large shareholders.

***H2b: There is a negative relationship between large shareholders and PP conflicts (performance) associated with M&A***

#### **4.3.1.4 Hypothesis 3a & 3b**

At both very low and very high levels of ownership, large shareholders may not show any signs of significant relationships. In European countries with concentrated markets, such as Germany and Finland, curvilinear relationships have been discovered where there are decreasing dividend payouts with increasing percentage of controlling shareholders (Gugler & Yurtoglu, 2003; C. Maury & Pajuste, 2002). They hypothesised that large shareholders help to reduce PA agency conflicts in these markets. However, these developed markets are also known for having strong legislation for shareholders' protection, in contrast with most of the Asean 5 markets as had been explained in the last two chapters. Consequently, hypothesis H3 suggests that there may be a non-linear relationship

between large shareholder and PP conflicts. It is proposed that dividend payouts increase with increasing percentage of large shareholders (quadratic).

***H3a: The ownership by large shareholders is non-linearly related to PP conflicts associated with M&A.***

***H3b: There is a positive relationship at high levels of ownership and a negative relationship at low levels of ownership.***

#### **4.3.1.4 Hypothesis 4**

As suggested by Yen and Andre (2007), performance of acquiring companies with high ownership concentration is associated with decreasing agency costs. The second objective also seeks to answer at what percentage threshold this commences for large shareholders. In this study, the question is extended to the next hypothesis in order to test the different percentages of shareholdings that may significantly impact PP conflicts.

***H4: There is a positive relationship between the largest shareholders' concentration (at 5%, 10%, 20%, 30%, 40% and 50% cut off) and PP conflicts associated with M&A.***

#### **4.3.1.5 Hypothesis 5**

The third objective, whether second large shareholders help to mitigate or worsen PP conflicts is justified in H5. The second large shareholders may have a prominent role in monitoring PA conflicts as suggested by Gugler and Yurtoglu (2003) in Germany. They find in Germany that larger holdings of the second largest shareholder reduce agency conflicts. However, this relationship may

actually worsen PP conflicts where collusion from both parties could form stronger incentives to expropriate in the Asean 5 market. It is hypothesised that there is a positive relationship between the largest and second largest shareholders associated with M&A in Asean 5.

***H5: There is a positive relationship between second largest shareholders with PP conflicts associated with M&A.***

### ***4.3.2 PP conflicts and Company Debt***

#### ***4.3.2.1 Hypothesis 6***

One of the main determinants in dividend as an expropriation model usually includes company leverage as a control variable (Faccio, et al., 2001b). Within companies with dispersed ownership settings, debt is suggested by Jensen (1986) to reduce agency costs of free cash flow by reducing cash available for spending by unscrupulous managers. Harris and Raviv (1988) and Stulz (1988) assert that controlling shareholders utilise leverage and cooperate with the debtholders to inflate the voting power of their shares which consequently may reduce PA conflicts in the US and Europe.

Companies with dispersed shareholders also use debt to ensure that professional managers are duly maximising their (shareholders') wealth. This implies that in a dispersed ownership setting, the leverage ratio should be positively related with large shareholders in lowering PA conflicts (Zeckhauser & Pound, 1990). The effective role of large shareholders there is ensuring that the managers will not shift the company's investment policies without the consent of debtholders. Large

shareholders in Asian markets, however, may use debt to facilitate expropriation in less regulated capital markets as found in Thailand, Indonesia, and South Korea (Faccio, et al., 2001b).

Furthermore, Faccio et al.(2001a) find that unlike in Europe, companies in Asia use debt to fund projects with higher risks where loans are given by “related parties” who share a controlling shareholder with the borrower. The ineffectiveness of capital markets in Asia also allows for debt to be utilised more than equity which may mean the minority shareholders are susceptible to being expropriated. The controlling shareholders impose more power and control over the companies’ resources, which may be the cause of over-investment problems (Harvey, Lins, & Roper, 2004). This also means that minority shareholders are at risk because of high leverage problems from higher costs of financial distress (Fama & French, 2002) and bigger gaps in information asymmetry due to assets being less tangible from the over-investment problem (Harris & Raviv, 1988).

The commitment to pay out interest from high leverages reduces the ability of the company to pay out dividends, *ceteris paribus*, to shareholders (M. Jensen, 1986). The notion for the next hypothesis is an inverse relationship between the dividend and leverage as stated in previous literature (Al-Malkawi, 2005; Bradley, Capozza, & Seguin, 1998; Crutchley, Jensen, Jahera, & Raymond, 1999; Faccio, et al., 2001a; Gugler & Yurtoglu, 2003).

***H6: There is a negative relationship between leverage and PP conflicts associated with M&A.***

### ***4.3.3 PP conflicts and Company Growth***

#### ***4.3.3.1 Hypothesis 7***

La Porta et al. (2000a) remark that shareholders may use their legal voting power to force management to pay out dividends when growth prospects are down. A recent study in Asean 4 countries (Indonesia, Malaysia, Thailand and Philippines) by Banchit and Locke (2011) using dividend policy as proxy for PP conflicts and found it is negatively related with the company's growth rate.

Sales growth is used as proxy for growth rate as it is an indicator of whether companies will reach their financial objectives, be competitive and achieve better future prospects (Chiou, et al., 2010; Kaplan & Norton, 1996). The following hypothesis is formulated and anticipated to be negatively related with sales growth as the control variables for PP conflicts.

***H7: There is a negative relationship between PP conflicts and growth rate associated with M&A.***

### ***4.3.4 PP conflicts and Company Size***

#### ***4.3.4.1 Hypothesis 8***

Companies that are larger in size are suggested by the literature to pay out higher dividends (Fama & French, 2001). Bigger companies rely less on internal finance since they have more flexibility in raising funds from capital markets with relatively lower costs. Company size is also usually incorporated in prior studies

as a control variable that has been shown to affect dividend ratios (Grullon, Michaely, & Swaminathan, 2002). Controlling shareholders in bigger companies with more resources are less monitored and as such the prediction is based on a positive relationship with PP conflicts.

***H8: There is a positive relationship between company's size and PP conflicts associated with M&A.***

#### ***4.3.5 PP conflicts and company's age***

##### ***4.3.5.1 Hypothesis 9***

The age of a company's incorporation may be an important determinant for dividends ratio with the argument that older companies are more stable and usually pay out more dividends compared to younger companies (Al-Malkawi, 2007). Some studies do not support this notion and do not include this variable at all in their studies (Adjaoud & Ben-Amar, 2010). It is of importance however in the M&A literature that mature companies have more experience and resources to enable them to undertake successful M&A outcomes with positive post-performance. (Haleblian & Finkelstein, 1999).

***H9: There is a positive relationship between company's age and PP conflicts associated with M&A.***

### ***4.3.6 PP conflicts and M&A performance***

#### ***4.3.6.1 Hypothesis 10***

It is noted that controlling shareholders may make unprofitable investment decisions at the expense of other minority shareholders. This may be done in a self-interested manner by tunnelling corporate resources or paying higher premiums to gain a larger empire for more self-privilege actions (Johnson, et al., 2000). As a result, higher premiums are paid out in mergers or takeovers, as argued by Sirower (1997), to destroy acquisition value. The following H10 examines this relationship between M&A performance with PP conflicts,

***H10: There is a negative relationship between M&A values and PP conflicts.***

### ***4.3.7 PP conflicts and method of payments***

#### ***4.3.7.1 Hypothesis 11***

Controlling shareholders of the acquiring companies may prefer to use cash instead of shares to purchase because they resent the fact that their ownership will be diluted after M&A (Amihud, et al., 1990; Martin, 1996). Theoretically, as internal cash is utilised to finance M&A, dividend payouts should also be reduced. Nevertheless, in the next hypothesis, dividend payout is hypothesised to be positively related with cash payment to show that PP conflicts are worsening when cash is depleted for dividend disbursements.

***H11: There is a positive relationship between payment method using cash and PP conflicts.***

***H11b: There is a negative relationship between payment method using shares and PP conflicts***

#### ***4.3.8 PP conflicts and toehold companies***

##### ***4.3.8.1 Hypothesis 12***

Questions about whether bidder companies have control pre-M&A are also investigated to ascertain shareholder control over the investment decision. The relationship between the toehold companies is then hypothesised to have a positive relationship with PP proxy because large shareholders of the acquirers' companies may make M&A decisions to acquire the companies to an extent of providing more private benefits for them.. (Bae, et al., 2002; Nam, 2001).

***H12: There is a positive relationship between toehold companies with PP conflicts***

#### ***4.3.9 PP conflicts and relatedness with target companies***

##### ***4.3.9.1 Hypothesis 13***

When companies are merging and/or acquiring a target company of another industry, Bae et al. (2002) and Holmen and Knopf (2004) advocate that expropriation is more likely to occur when acquirer and target are from different industries. However, large shareholders tend to expropriate regardless of whether these companies engaging in M&A are within related or non-related industries. H13 is suggesting from the past literature that the relationship between PP

conflicts and industry relatedness of target companies is negatively associated with M&A.

*H13: There is a negative relationship between industry relatedness of target companies with PP conflicts.*

#### **4.3.10 PA conflicts and large shareholders**

##### **4.3.10.1 Hypothesis 14a, 14b and 14c**

Though PA conflicts cannot be entirely eliminated by concentrated ownership, it is likely that this type of conflict may be material in Asean 5 markets. In fact, the role of large shareholders is indicated in mature market settings as a solution to PA conflicts. It has been reiterated that managers who are appointed by the large shareholders may collude with each other (Becht, et al., 2010; Burkart & Lee, 2008) to make M&A decisions that could exacerbate agency conflicts and adversely affect company's efficiency. Hence, hypotheses 14 state the followings:

*H14a: Acquiring companies' asset utilisation is higher before M&A.*

*H14b: Acquiring companies' asset utilisation is lower after M&A.*

*H14c: There is a negative relationship between large shareholders and PA conflicts associated with M&A.*

## **4.4 Summary**

This chapter provides description of the theoretical framework used for formulating the hypotheses development. It then develops and explains the

hypotheses to be tested in the next chapter. Firm-specific variables of M&A motivation are incorporated to include size, growth, profit consideration and leverage (Ali & Gupta, 1999; Dickerson, et al., 1998). Other important determinants are deal characteristics such as M&A value of transactions, age of corporation, relatedness with the target company and method of payments (Hitt, Harrison, & Ireland, 2001).

These hypotheses facilitate an understanding of PP conflicts, in particular the dividends as its proxy and various explanatory variables. The next chapter will present the methods for collecting data, definitions of the variables, econometric methods and models for testing the relationship of PP conflicts in Asean 5 M&A.

## **CHAPTER 5: DATA AND METHODOLOGY**

### **5.0 Introduction**

This chapter discusses the methodological aspects of the current study. The methodological approach is overly positivist and the research methods are applied to data with the objective of discovering the current situation. The analysis for micro-econometric input and the data are drawn from secondary sources.

The chapter is structured as follows. Section 5.1 presents the data collection and sample selection method. These procedures have been particularly time consuming, involving tedious and meticulous collection and checking of data for the analysis. The outcome is the use of extensive and reliable data from 807 companies (1,013 effective deals) from the years of 2000 to 2008. Other control variables have also been collected for pre- and post-three years of effective deals which make up 6,400 total observations.

Section 5.2 presents the description of the final sample. Section 5.3 addresses the measurement, conceptualisation and operationalisation of variables and provides explanation of dependent and independent variables used in this study. This study uses two different types of proxies as a robust measurement for PP conflicts. Section 5.4 presents method. Section 5.5 presents specification tests including estimation of standard error, auto-correlation tests, testing of several coefficients jointly and a multicollinearity test. This section makes a new contribution by applying a recent but powerful regression analysis that involves the inclusion of

time-variant and time-invariant variables in the models. Finally, Section 5.6 concludes.

## **5.1 Data and sample selection**

Studies involving multiple developing markets usually face difficulties collecting reliable historical data for empirical analysis. Information in the databases is improving especially since year 2010 but the adverse effect of not having historical data would be to establish robust and rich generalisable results. This study endeavours to bridge this gap by relying on the availability of data from the best international databases and also from published online information.

Table 5 presents the sample selection criteria for this study. The original dataset comprised 4,253 effective M&A deals. However, the final sample was reduced to 1,013 deals (807 acquiring companies) from years 2000 to 2008 after going through the different stages of sample selection explained below. Generally, there are three main stages in building the sample dataset to ensure it is appropriate for the analysis.

First, data is extracted from the Securities Data Corporation's (SDC) Platinum<sup>TM</sup> *Worldwide Mergers & Acquisition Database*. This database is regarded as the most comprehensive source of M&A transaction data (Lang & Tudor, 2003). Researchers in M&A studies have also been using this database extensively to conduct their analyses (Ben Amar & Andre, 2006; Faccio & Stolin, 2006; Kamaly, 2007; Luo, 2005; Martynova & Renneboog, 2009).

All completed and successful M&A companies from January 2000 through to December 2008 were collected inclusively. The sample then had to meet the following criteria.

- i) Acquiring firms are public listed companies
- ii) Deals are completed and are mergers, exchange offers or acquisitions of majority interests

Second, financial variables in Worldscope/Thomson database (Thomson One Banker Analytics) are matched to the M&A companies selected in Stage 1. Since the accounting data are reported with a delay, the analysis uses data three years before and three years after M&A. These values are calculated as default in the database whereby the real market value in the home country is converted to US dollars using the exchange rate at the end of the company's fiscal year. This is to ensure consistent measurement for data analysis (Cummins, Hassett, & Hubbard, 1996). Financial and market data must also be available for bidder companies three years prior to the M&A transaction, and also four years post-M&A. This includes the year of M&A which does not capture the financial characteristics post-M&A. Thus the data spread from 1997 to 2011 covering 15 years. Other criteria include the following:

- i) Companies excluded are those that are in the financial and utilities industries (SIC codes 6000 – 6999 and 4900-4942 ) as these companies are highly regulated and could bias the overall results (Fama & French, 2001; Louis, 2004; Song, 2007b)
- ii) Entity key or Sedol codes are available for acquirers

- iii) Accounting and market values data are available on World scope/Thomson so that the various measures of dividend ratios, operating performance and the market's assessments of the gains from M&A can be estimated
- iv) Data for the calculation of measures of financial performance and industry are available from years 1997 to 2011
- v) Multiple acquisitions are regarded as one observation in a three-year period. This will allow for a three-year clean observation of the bidding company's financial performance (Song, 2007b)

Third, ownership shareholding percentages are collected from Thomson Ownership database. This database derives its information from various sources including public announcements made by individual corporations, regulatory filings and stock exchange listings by corporations. An independent check with available historical annual reports (20% of the sample corporations) with shareholdings revealed that these are accurate.

For the purpose of this thesis, the ownership data are collected one year prior to the announcement of the M&A. This is because the final decisions by the management for M&A would have been done prior to the announcement of the M&A. Hence, only acquirers with ownership data that are available one year prior to the announcement date will be selected which includes data from years prior to 2000 up to 2007. Further checks also reveal that there are no significant changes in shareholdings after M&A.

There are some challenges faced during this stage. Ownership data in Thomson One database reports historical data only from 1997 onwards and even with that, the Thomson database has its own potential problems that require care when using this data (Ince & Porter, 2006). Availability of historical ownership data before 2010 from the five Asean countries in this study is also very limited<sup>5</sup>. There are different reporting systems for each country. It is reported for the shareholding of the largest ten shareholders in Malaysia, Singapore and Philippines, the shareholding of the largest five shareholders in Thailand and the principal shareholder in Indonesia.

Because of these missing values, annual reports for each company are then downloaded from the market's stock exchange website or from their respective companies' websites. There were also emails sent out to some companies requesting they send their annual reports.

Most of the companies in Malaysia and Singapore contain published online annual reports from 2002 onwards. Indonesia, Thailand and Philippines only have recent annual reports. Differences in ownership reporting standards pose further challenges where only Malaysian annual reports published top 30 major shareholders, while companies in the other four markets may report from the top 5 to top 20 shareholders.

From here, the types of large shareholders are identified to ascertain whether they are individuals, companies or institutional investors. If the dominant owner was a

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<sup>5</sup> As explained by Thomson Reuters customer support in their corresponding email regarding the limited coverage.

nominee, the dominant was traced in the notes to confirm who the owner was (if disclosed).

For instance, GHL Systems Bhd Inc in Malaysia acquired a private company which was announced and became effective in April 2005. As there was no data available via Thomson, the next step was to search the published annual report for the said company for information on major shareholders registered in April 2004. The substantial shareholder, reported in the 2004 Annual Report, named JMF Asset Management Sdn Bhd at 19.05% as the nominee. Herewith, this is traced in the disclosure to a company named BSNC Corporation Berhad.

Another example is when a company in Indonesia, Bakrie & Brothers Tbk PT acquired a public company and was announced in January 2008. Ownership required is a year before the announcement which was either December 2006 and January 2007. Its published 2007 annual report has five items on its list of shareholders (including Public at 29.2%) as at December 2006 with Pt Bakrie & Brothers Tbk as the substantial shareholder at 50.25%.

Due to inconsistencies in reporting the list/analysis of substantial/major shareholders for companies in each country, the analysis only uses the first two substantial shareholders. This will also eliminate any bias results due to the differences of share classes practised in the five markets. As explained in Section 3.4, East Asian companies have no significant deviations from one-share-one-vote rule through shares with different voting rights (Claessens, et al., 2000a) which will not affect the results even with the differences of class shares.

This exercise leads to the final sample which comprises of 1,013 deals (807 acquiring companies) from years 2000 to 2008 with various different industries.

Table 5 shows the selection criteria for the deals included in the sample.

Table 5: Sample selection criteria

<b><u>Total available effective deals</u></b>		
Effective deals from 2000 - 2008 (SDC Database)		4,253
<i>Minus</i>		
Banks, other finance and utilities	738	
Multiple bids	1,728	
No data available (ownership, financial data)	774	
<b>Total available effective deals for analysis (Comprises of 807 acquiring companies)</b>		<b>1,013</b>

## 5.2 Measurement, conceptualisation and operationalisation of variables

### 5.2.1 *Dependant variables*

Ratio of common dividends to cash flow is used when available. If no data are available, information on the common dividend is taken from the difference of total dividends and preferred dividends (Denis & Osobov, 2008). Because of the differences in accounting standards in each country, other measures of dividend payout ratio are analysed as well. This is also important because some of the accounting methods chosen are taken into account from the recognition of differences in timing of the revenue and costs and poor record-keeping in some

companies (Frederikslust et al., 2008). Following research by Faccio et al. (2001b), the thesis incorporates three other different specifications of dividends which are dividend to earnings ratio, dividend to market capitalisation and dividend to sales. The description of variables and method for the calculations are explained in Table 6.

Lag of dividends or last year's dividend data are also included in the model because empirical studies of dividend models persistently find this important in explaining this period's dividend. Excluding them would result in a biased estimation to the model (DeAngelo, et al., 2004; Fama, 1974).

The principal-agent (PA) conflicts must also be investigated. Following Ang et al. (2000) and Singh & Davidson (2003), the assets utilisation ratio (total sales/total Assets) is used as a PA agency proxy for this study. The relationship between PA conflicts and explanatory variable is set to be inversely related. This ratio provides for management's ability to employ the company's assets efficiently. Poor asset utilisation ratio will reflect poor management decisions in generating revenue for each dollar of shareholders' investment. Because this ratio is based on the items before net income, then the large shareholders may not have any access to sales revenue.

For robust analysis, Tobin's q is also being used as one of the dependent variables following many past studies that have used this in their methods (Cronqvist & Nilsson, 2003; Dahya, et al., 2008; Wiwattanakantang, 2001). Their argument that Tobin's q acts as a proxy for performance measurement will indicate that

lower/higher company value shows higher/lower expropriation incidence by the dominant shareholders.

However, company performance can also influence the ownership structure which may cause endogeneity issues in the model (Jensen & Warner 1988). For instance, Himmelberg et al.,(1999) show that managerial ownership is an endogenous variable in models of panel data set company performance (Tobin's q). They observe that this could occur because the owners of the company have access to a greater monitoring technology which means that the value of company will be higher because company resources will not be splurged unnecessary to the managers. This study incorporates the endogeneity issue by identifying this in the regression model by utilising Hausman-Taylor and dynamic Tobit analysis.

Most often, Tobin's q ratio is calculated as market value of assets measured by the sum of market value of debt and equity divided by replacement of assets. However, replacement cost information is not readily accessible because of the unavailability of financial information from past decades and the inactivity of corporate debt markets in South East Asia (Yon, 1999). Hence, an alternative acceptable measurement of Total Asset (sum of the book value of equity, debt, and preferred shares) is used to replace this information (Chung & Pruitt, 1994).

### ***5.2.2 Independent variables***

The independent variables can be distinguished into two main categories - the level of controlling shareholder variables and control firm-specific variables that impact dividend payout and M&A. Firm-specific variables include growth or

investment opportunities (sales growth), debt, size using the logarithm of total book value of assets and performance. The analysis uses 17 industry dummies according to Guidelines for Classification of Listed Companies issued by the Fama and French classification (Fama & French, 2011) system which corresponds to the Thomson Financial with the Standard Industry Classification system (SIC) listed in Appendix 2.

#### **5.2.2.1 *Large, controlling shareholders (ownership variables)***

The ownership variable is found by taking two ways of measurement to test for expropriation of PP conflicts. The first way is by applying the largest shareholder as a continuous variable for the actual percentage of voting shares held from 5% or more (Claessens, et al., 2002; Faccio & Lang, 2002; Holderness & Sheehan, 1988; R. La Porta, et al., 1999). This variable is also squared in subsequent models to take into the consideration the non-linear relationship of large shareholder and PP conflicts. The main explanatory variable for investigation is the large shareholder collected in period t-2 because the decision to M&A will be made before the announcement period (indicated at t-1) (Song,2007b).

Previous research suggests the cut off point for control at various points such as 10% (C. Maury & Pajuste, 2002; Yen & Andre, 2007), 15-25% (Loh, 1996) and 20% (Berle & Means, 1932; Claessens, Djankov, Joseph, et al., 1999) and up to 50%, as it not only dominates but this threshold also allows the shareholder to legally control the company (Becht & Röell, 1999; Faccio & Lang, 2002). Chapter 2 explains the various definitions of concentration control in Indonesia

(25%)<sup>6</sup>, Malaysia (33%), Singapore (25%)<sup>7</sup>, Philippines (35%) and Thailand (25%).

The second way to measure is to classify the coding methods in order to capture large shareholder at different large shareholder stakes, similar to research done by Faccio and Lang (2002) and Yen and Andre (2007). The acquirer's ownership variables include five dummy variables at different thresholds of voting shares by the largest shareholder. These thresholds are set at Concen10 (concentrated ownership at 10% threshold), Concen20 (concentrated ownership at 20% threshold), Concen30 (concentrated ownership at 30% threshold), Concen40 (concentrated ownership at 40% threshold) and Concen50 (concentrated ownership at 50% threshold).

#### **5.2.2.2 Profitability variables**

The econometric model incorporates profitability variable as the variable may impact the dividend payouts. Operating cash flows and return on earnings are used in this analysis (Aivazian & Booth, 2003). Consistent with other performance measurement studies, operating cash flow returns are computed for each of the three years before and after M&A. The performance measurement chosen for operating cash flows (OCF) is unaffected by the method of accounting for the merger (purchase or pooling accounting) and the method of financing (cash, debt or equity). Furthermore, it is also unbiased towards differences of

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<sup>6</sup> Prior to 2008

<sup>7</sup> Prior to 2005

account methods, tax policy or the type of financing used to fund the acquisitions (Healy, et al., 1992; Song, 2007b; Yen & Andre, 2007).

### **5.2.2.3        *Lag variables***

Ownership and dividend payout may be endogenous to the company (Jensen et al., 1992). This relationship has been conceptualised by Demsetz and Lehn (1985) and adapted by Truong & Heaney (2007). In addition, the model requires for the lag of profitability to remove any endogeneity effect to the dividend payouts which will be discussed in Section 5.3.5. As explained earlier, this study incorporates the endogeneity issue by identifying this in the regression model by utilising Hausman-Taylor and dynamic Tobit analysis.

The analysis includes several countries and consistent with the work of comparative studies by Schulze et al. (2003; 2001), other financial and industry variables are being controlled in the model. Corporate profitability may also have an impact to the dividend payouts. Some of the earlier dividend studies do not incorporate this variable but in light of conservative accounting information, alternative measures of profitability are used. Other control variables that relate to the merger and acquisition performance (which may affect dividend payouts) are included in the model. This is important because other sources of uncertainty that may arise from cross-country variations can also be controlled (Albuquerque & Wang, 2008).

#### 5.2.2.4 *Other firm-specific variables*

Other firm-specific variables are included in the analyses to control for other factors that might have a systematic effect on dividends. Beta represents business risk, a mathematical measure of the sensitivity of the rates of return on the company's share, compared with the rates of return on the market as a whole (G. R. Jensen, et al., 1992; Moh'd, et al., 1995; Rozeff, 1982).

Leverage measured by using the ratio of debt to assets, is recognised in the literature as a substitute for dividends. Not only does that leverage act as a control variable, it is also the next option after cash flow to fund operations costs of M&As (S. C. Myers & Majluf, 1984). The regression analysis is added by using the proxy for debt being financial leverage ratio as defined as ratio of short term debt and long term debt to total shareholders' equity (DER) and ratio of financial debt to net assets (D/A) (Faccio, et al., 2001b).

The size and growth of the company are indicated by natural logarithm of total assets and growth rate of sales (Deshmukh, 2003; La Porta, et al., 1999). This is because large and fast growing companies tend to pay large dividends to reduce agency costs in mature markets (Faccio, et al., 2001b; Jeon, et al., 2010).

Age is measured based on the number of years a business is in existence (Chrisman, Chua, & Litz, 2004). To determine age, the company's stated date of formation is subtracted from the year of effective M&A. To adjust for skewness in the distribution of size and age, natural logarithm is also being calculated.

Several variables that capture M&A deal characteristics are also examined. Following Officer (2003), the natural logarithm (transaction value) is applied to calculate deal premium. Another important M&A control variable is Related Deal where it is a dummy variable equal to 1 if an acquirer and a target share the same primary two-digit SIC code and 0, otherwise (Al-Kuwari, 2009).

#### **5.2.2.5 M&A variables**

Most M&A studies incorporate payment methods in their analyses. They hypothesise that managers of acquiring companies who assume control instigate cash as a method of payment rather than using shares. This is because a M&A using shares dilutes the managers' ownership (including shareholders themselves) in the combined companies (Amihud, et al., 1990; Jeon, et al., 2010). Payment using cash, shares or a mixture are denoted with dummy variable equal to 1 while 0, otherwise.

#### **5.2.2.6 Industry and country control variables**

Dividend ratios are much more likely to differ across different industries. Hence, because of the variety of industries in the sample, it is imperative to control for industry-specific effects to ensure reliability of the results (Renneboog & Trojanowski, 2007). And finally, the year dummy must be included to control for the year of effective M&A of each company in the sample.

Table 6: List of dependent and independent variables

<b>VARIABLE</b>	<b>ACRONYM</b>	<b>DESCRIPTION</b>	<b>(TI: Time Invariant, TV: Time variant)</b>
PP conflicts	Div/cf	Dividend to cash flow ratio. Dividends are total cash dividends paid to common and preference shares. Source: Worldscope	TV
	Div/earn	Dividends as percentage of earnings	TV
	Div/sales	Dividends as percentage of total net sales.	TV
	Div/mcap	Dividends as percentage of market value of equity at the end of year.	TV
	Tobin's q	Market value of the acquirer's equity as of the calendar year-end prior/post to M&A transaction plus the book value of debt and preferred shares from the most recent financial statement prior/post to the M&A year divided by the sum of the book value of equity, debt, and preferred shares as of the same date.	TV
PA conflicts	Efficiency ratio	Ratio of total sales to total assets	TV
Ownership concentration <b>"OWN"</b>  (taken a year before announcement of M&A)	Lship	The percentage of voting shares held by the largest shareholder	TI
	Lshipsq	The square of the percentage of voting shares held by the largest shareholder	TI
	L2ndship	The percentage of voting shares held by the second largest shareholder	TI
	Concen5	Dummy variable 1 if a shareholder owns more than 5% of voting share of the acquiring company	TI
	Concen10	Dummy variable 1 if a shareholder owns more than 10% of voting share of the acquiring company	TI
	Concen20	Dummy variable 1 if a shareholder owns more than 20% of voting share of the acquiring company	TI
	Concen30	Dummy variable 1 if a shareholder owns more than 30% of voting share of the acquiring company	TI
	Concen40	Dummy variable 1 if a shareholder owns more than 40% of voting share of the acquiring company	TI
Profitability	CF/TA	Ratio of cash flow to total assets	TV
	CF/Sales	Ratio of cash flow to total net sales	TV
Growth opportunities	GSales	Growth in sales over the prior year	TV
Firm size	lgTA	Log of book value of total assets and reported in US dollars Local currencies are converted to US dollars at the exchange rates in effect at the end of 2004	TV
Debt capacity	TD/TA	Ratio of total debt to total assets	TV
	LTD/TC	Ratio of long term debt to total capital	TV

Risk	Beta	A measure of market risk which shows the relationship between the volatility of the stock and the volatility of the market. This coefficient is based on between 23 and 35 consecutive month end price percent changes and theirrelativity to a local market index. <i>Source: Worldscope</i>	TV
Related Dummy	Related	Dummy variable1 if the target industry is related, 0 if otherwise	TI
Age of incorporation	Age	Years of company’s incorporation until the time of effective M&A	TI
Toehold	Toehold	Dummy variable 1 if the acquiring company owns any target shares before transaction	TI
Value of Transaction	ValTran	Transaction paid for M&A (US\$mil) Total value of consideration paid by the acquirer, excluding fees and expenses. The dollar value includes the amount paid for all common stock, common stock equivalents, preferred stock, debt, options, assets, warrants, and stake purchases made within six months of the announcement date of the transaction. Liabilities assumed are included in the value if they are publicly disclosed. Preferred stock is only included if it is being acquired as part of a 100% acquisition. If a portion of the consideration paid by the acquirer is common stock, the stock is valued using the closing price on the last full trading day prior to the announcement of the terms of the stock swap. If the exchange ratio of shares offered changes, the stock is valued based on its closing price on the last full trading date prior to the date of the exchange ratio change. (Based on the definition by Thomson SDC database)	TI
Method payment for the M&A	PayCash	Dummy variable 1 if method of payment is cash, 0 if otherwise 2 share, 3 hybrid (mixed) and 4 unknown	TI
	PayShare	Dummy variable 1 if method of payment share, 0 if otherwise	TI
Country variables	Indonesia	Dummy variable 1 if acquiring company nation is Indonesia, 0 if otherwise	
	Malaysia	Dummy variable 1 if acquiring company nation is Malaysia, 0 if otherwise	
	Thailand	Dummy variable 1 if acquiring company nation is Thailand, 0 if otherwise	
	Singapore	Dummy variable 1 if acquiring company nation is Singapore, 0 if otherwise	
	Philippines	Dummy variable1 if acquiring company nation is Philippines, 0 if otherwise	

EffYear	Effective Year	1 of the M&A effective year; 0 if otherwise	
Industry	AcqSIC1	Dummy variable 1 if the industry of the Acquirer is in Food, 0 if otherwise	
	AcqSIC2	Dummy variable 1 if the industry of the Acquirer is in Mining and Minerals, 0 if otherwise	
	AcqSIC3	Dummy variable 1 if the industry of the Acquirer is in Oil & Petroleum Products, 0 if otherwise	
	AcqSIC4	Dummy variable 1 if the industry of the Acquirer is in Textiles, apparel and footwear, 0 if otherwise	
	AcqSIC5	Dummy variable 1 if the industry of the Acquirer is in Consumer Durables, 0 if otherwise	
	AcqSIC6	Dummy variable 1 if the industry of the Acquirer is in Chemicals, 0 if otherwise	
	AcqSIC7	Dummy variable 1 if the industry of the Acquirer is in Drugs, Soap, Perfumes & Tobacco, 0 if otherwise	
	AcqSIC8	Dummy variable 1 if the industry of the Acquirer is in Construction and Construction Materials, 0 if otherwise	
	AcqSIC9	Dummy variable 1 if the industry of the Acquirer is in Steel Works, 0 if otherwise	
	AcqSIC10	Dummy variable 1 if the industry of the Acquirer is in Fabricated Products, 0 if otherwise	
	AcqSIC11	Dummy variable 1 if the industry of the Acquirer is in Machinery and Business Equipment, 0 if otherwise	
	AcqSIC12	Dummy variable 1 if the industry of the Acquirer is in Automobiles, 0 if otherwise	
	AcqSIC13	Dummy variable 1 if the industry of the Acquirer is in Transportation, 0 if otherwise	
	AcqSIC14	Dummy variable 1 if the industry of the Acquirer is in Retail Stores, 0 if otherwise	
	AcqSIC15	Dummy variable 1 if the industry of the Acquirer is in Other supplies and services, 0 if otherwise	

### 5.3 Methodology

This section describes the models assumptions and its diagnostic procedure, followed by the model specifications. The main contribution from this section is the application of recent but powerful regression analysis that involves the inclusion of time-variant and time-invariant variables in the models. Figure 6 below presents the concept map of methodology.

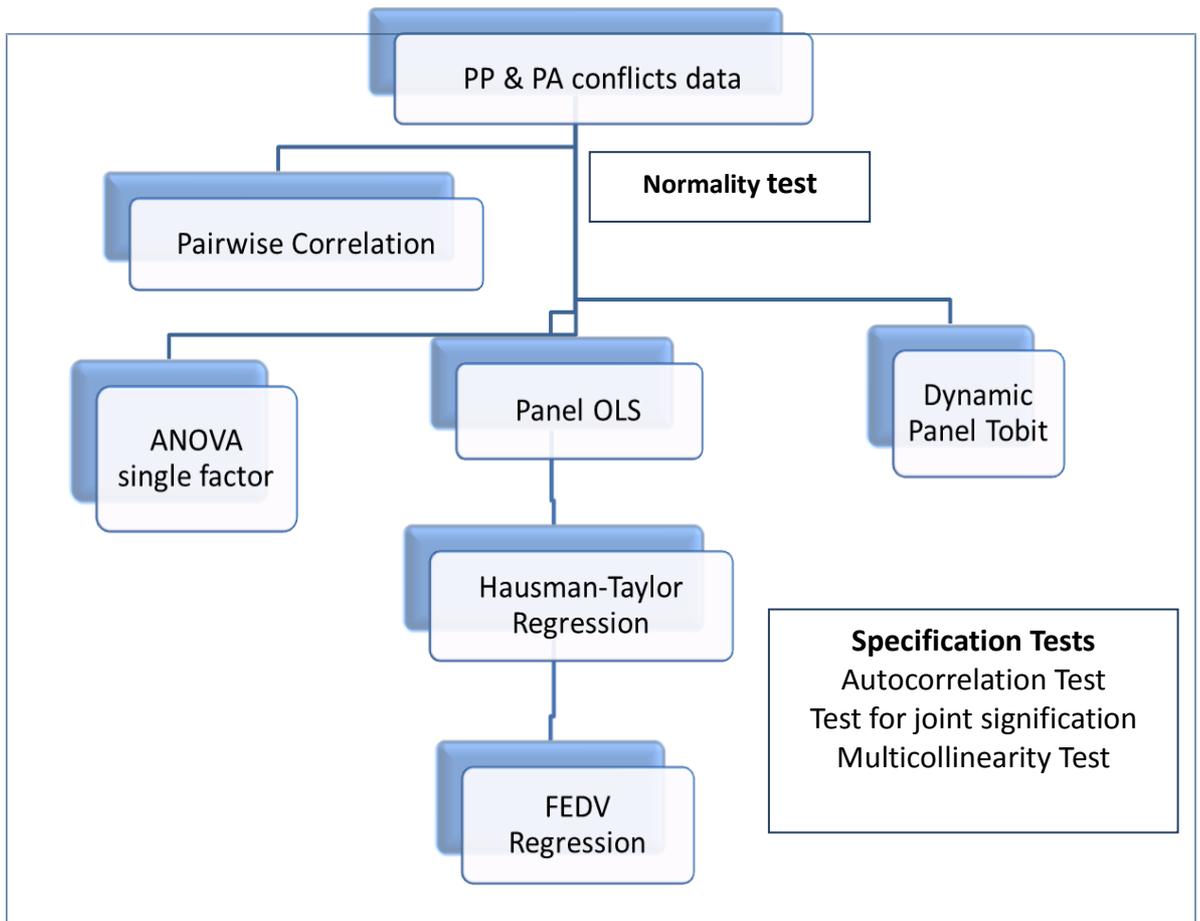


Figure 6: Concept map of the methodology

### 5.3.1 Testing for data assumptions

Before any results are drawn from statistical analysis, a partial plot was drawn to conclude that a linear model was appropriate for describing the relationship between PP conflicts and the explanatory variables. Furthermore, it is also necessary to identify any possible outliers that may distort the final results. For this data, outliers are determined by checking the skewness or heavy tails. Box plots and Jarque-Bera (skewness-kurtosis) test are constructed for normality tests. However, the data set of this thesis is considered large (when observations are

more than 30) and hence, the sampling distribution more closely resembles a normal distribution (Selvanathan, Selvanathan, Keller, & Warrack, 2004)

The above tests show that the dependent variables are strongly skewed (except for Efficiency Ratio) and some independent variables. This is normal as found in other socioeconomic data research (Mukherjee, White, & Wuyts, 1998). Logarithmic transformation was done to some variables data (sales, cash flows and total assets) to shrink the skewed tail to render it more symmetrical. Another method is by winsorizing or taking out extreme data in both tails to reduce influential bias. Problems pertaining to outliers are addressed by using Huber's M-estimator<sup>8</sup> with  $k=1.28$  to estimate the measure of location and detect the outliers (Douma, George, & Kabir, 2006; Yen & Andre, 2007). It is also advised that it is preferable to use a robust estimator which is the median instead of the mean to estimate the centre of distribution when there are deviations from normality.

### 5.3.2 *Pairwise Correlation*

The next analysis to be done is to check the pair wise analysis to understand the correlation between the variables. The correlation coefficient, sometimes also called the cross-correlation coefficient, is a quantity that gives the quality of a

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<sup>8</sup> M-estimator has been broadly applied by using  $K=1.28$  (Huber, 1964). For the M-estimators is trimming ratio is introduced by Equation 1 where any observed value  $X$  is declared an outlier based on the sample median,  $M$  and the median absolute deviation,  $MAD$ .

$$\frac{|X - M|}{MAD/0.6745} > K$$

least square fitting to the original data. Least square is a mathematical procedure for finding the best-fitting curve to a given set of points by minimizing the sum of the squares of the offsets ("the residuals") of the points from the curve.

The sum of the *squares* of the offsets is used instead of the offset absolute values because of Gauss-Markov Theorem<sup>9</sup> and also this allows the residuals to be treated as a continuous differentiable quantity. However, because squares of the offsets are used, outlying points can have a disproportionate effect on the fit, a property which may or may not be desirable depending on the problem at hand (Weisstein).

Known as R or r, the pairwise correlation measures the strength and direction of the linear relationship between two variables that is defined in terms of the (sample) covariance of the variables divided by their (sample) standard deviations. The strength of the correlation coefficients of the association between two variables varies from -1 (perfectly negative correlation, meaning that high values of one variable are always associated with low values of the other) via 0 (no correlation) to +1 (perfectly positive correlation, meaning that high values of one variable are always associated with high values of the other).

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<sup>9</sup> "The Gauss-Markov theorem states that in a linear model in which the errors have an expectation of zero and are uncorrelated and have equal variance; the best linear unbiased estimators of the coefficients; normal distribution, with a mean equal to the true value and with variance given." (Jirina&Jirina, 2008, p10)

### 5.3.3 *T-test and Wilcoxon signed-rank test: Analysis of dividend changes around M&A*

The analysis for changes in mean or median are constructed utilising parametric and non-parametric testing. Paired t-test and Wilcoxon test are both done to the dependent variables to investigate the changes in the dependent variables pre- and post-M&A. However, the central limit theorem suggests that the larger the sample size (when observations are more than 30), the more closely the sampling distribution resembles a normal distribution (Selvanathan, et al., 2004). Hence, parametric tests are already robust to deviations from normality because of the large sample in this thesis.

The first hypothesis relates to changes in PP conflicts associated with M&A. The comparison of two variables pre and post an M&A event are considered as paired analysis as they have not independently occurred (Selvanathan, et al., 2004). Accordingly, a one-tailed paired  $t$  test, where the sample mean post-dividend differs significantly from the mean pre-dividend after Year 0 (effective M&A) takes the form:

$$t = \frac{\bar{X}_D - \mu_0}{s_D / \sqrt{n}}. \quad (1)$$

where the  $D$  denotes the groups,  $(X_D)$  is the average of each group,  $(s_D)$  is the standard deviation of those differences,  $\mu_0$  is the constant at non-zero whether the average of the difference is significantly different from  $\mu_0$ , and  $n$  the sample.

A few assumptions must be addressed before drawing any conclusions from this test according to Park (2005). First, the type of variable should be either interval

or ratio. Second, the normality assumptions should also be met. If the assumption is violated, non-parametric methods can be used instead. However, the data set of this thesis is considered large (when observations are more than 30) and hence, the sampling distribution more closely resembles a normal distribution (Selvanathan, et al., 2004).

In this thesis, data that are tested for pre- and post-M&A are in ratios and this satisfies the first assumption. The second assumption has been explained in Section 5.3.1 which was to apply logarithmic transformation and winsorising to exclude extreme outliers. It also indicates that both parametric and non-parametric tests are conducted. The null hypothesis is that the true mean difference of the two variables is assumed to be zero unless explicitly specified.

The Wilcoxon rank-sum test is a nonparametric alternative to the two sample  $t$ -test which is based solely on the order in which the observations from the two samples fall. The objective is to compare two populations by ranking the data instead of using the variables' means. (In Stata, the command *signrank postdiv=prediv* is used). The Wilcoxon test is still valid for data from any distribution, regardless of whether the data is normal or not, and is much less sensitive to outliers than the two-sample  $t$ -test (Wild & Seber, 1999). The results for these tests are reported later in Table 10, which verifies that a similar conclusion is derived if the data are assumed to be normally distributed using  $t$ -test of  $\mu_2 - \mu_1$ .

#### **5.3.4 Panel data Regressions**

T-test and signed-ranked test are limited for explaining relationships when more than one parameter in the models is being conducted. The tests only allow for testing of value of one parameter at a time. Therefore, regressions analysis must be conducted to enable for testing of hypotheses with multiple parameters in the models.

The analysis for this study uses panel data that refers to the pooling of observations on a cross-section of companies over several time periods. It is the most efficient statistical method, widely used in econometrics and social science (Madalla, 2001). One of the main advantages of using panel data is that individual heterogeneity can be controlled since panel data suggests that individuals, firms, or countries are heterogeneous. Pure time-series and pure cross-section studies may produce bias results by not controlling those factors (Bhagat & Jefferies, 2002).

Another advantage is that panel data gives more “informative data, more variability, less collinearity among the variables, more degrees of freedom and more efficiency” as compared to non-panel data (Baltagi, 2005, p. 5). Panel data also allows a better understanding of changes in adjustments for which this study hopes to accomplish by looking at one point of time to other changes at another point of time, or two time periods. This calls for using dummy variables to establish for possible significant changes. The panel data estimation models are carried out utilising ordinary least square (OLS), weighted least square (WLS) and

Hausman-Taylor estimator (HT). The basis for using these methods will be elaborated further.

This thesis incorporates the basic regression dividend expropriation models from previous research (Faccio, et al., 2001b; La Porta, et al., 2000a). However, the main limitation for these papers is that their results are based upon the restricted cross-sectional ordinary least square (OLS) regressions method. This thesis endeavours to add to the empirical knowledge by utilising robust panel regressions, as discussed earlier.

A basic empirically testable dividend model was developed by Andres, Betzer, Goergen, & Renneboog Andres et al. (2009)<sup>10</sup>, based on the Lintner (1956) dividend model of adjustment of the current dividend as a function on the dividends of the previous year and earnings. This model has been claimed by some authors as being the best and most commonly used to set dividends (T. Khan, 2006).

$$Div_{it} = \beta_0 + (1 - \beta_1)Div_{i,t-1} + \beta_2 Earn_{it} + \beta_3 Earn_{i,t-1} + \beta_4 Year_t + \eta_i + V_{it} \quad (2)$$

where

*Div<sub>it</sub>* and *Div<sub>i,t-1</sub>* = Dividend per share company *i* pays in year *t* and *t-1* respectively, (*t*=effective year of M&A)

*Prof<sub>it</sub>* = Published profits in year *t* or Cash Flow per share at time *t* for firm *i*

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<sup>10</sup> Lintner (1956) partial adjustment model:  $Div_{it} = r_i E_{it}$  (E=Earnings). It is rewritten to  $Div_{it} - Div_{i,t-1} = \alpha_i + \beta_1 (Div_{it} - Div_{i,t-1}) + \mu_{it}$ . Upon using Fama and Babiak (1968) extended partial adjustment model by including a lagged earnings variable:  $E_{i,t-1} = (1 - \lambda_i) E_{i,t-1} + v_{it}$  where  $v_{it}$  is a serially uncorrelated error term. After arrangement to the full adjustment of dividends to the expected earnings change  $\lambda_i E_{i,t-1}$ , and partial adjustment to the remainder:  $Div_{it} - Div_{i,t-1} = \alpha_i + \beta_1 (r_i E_{it} - \lambda_i E_{i,t-1}) - Div_{i,t-1} + r_i \lambda_i E_{i,t-1} + \mu_{it}$  (Andres, et al., 2009).

$Year_t =$  with  $t=1, \dots, T$  are time dummies that control for the impact of effective year/time on the dividend behaviour of all sample companies

$\eta_i$  = is a firm-specific effect to allow for unobserved influences on the dividend behaviour of each company and is assumed to remain constant over time

$V_{it}$  = disturbance term

#### 5.3.4.1 Application of model and challenges to current study

The model in this thesis is the estimation for PP conflicts with dividend ratios and its independent variables from the period 1997 to 2010 using fixed effect specification for controlling firm effect. Therefore, the analysis should be extended to control for the effect with ownership concentration. In another effort to emphasize robustness in this study, Himmelberg et al.(1999) proposes that firm characteristics and fixed firm effects be controlled to correct any exogenous effects of ownership on dependant values. These variables include debt and total assets as studied by Faccio et al. (2001a), growth in sales by La Porta et al. (2000). Therefore Equation (3) is transformed by extending Equation (2) into the following, which forms the base model for this thesis:

$$Div_{it} = \beta_0 + (1 - \beta_1)Div_{i,t-1} + \beta_2 Earn_{it} + \beta_3 Earn_{it-1} + \beta_4 Year_t + \beta_5 Own_{i,t-2} + \beta_6 GrowthSales + \beta_7 Debt + \eta_i + \varepsilon_{it} \quad (3)$$

where

$Div_{it}$  represents PP conflicts,  $i$  refers to acquiring companies and  $t$  represents the time period of effective deals. The parameter  $\beta_5$  represents the impact of large shareholders (described in Table 6) on PP conflicts.  $\eta_i$  is unobserved firm-specific effect and  $\varepsilon$  is the disturbance term. It is assumed that  $\varepsilon$  has a zero mean,

and is serially uncorrelated and independently distributed across firms but no restrictions on heteroskedasticity across time and across firms.

M&A are referred to by economists as non-contemporaneous events because they do not occur on the same day across all entities (de Grassa & Masson, 2012). In an aggregate analysis, a regression model is appropriate to run to ascertain the effects of explanatory variables on the dependent variable. However, in a multiple event window setting, the aggregate analysis cannot be applied unless the event windows are at the same time for all companies.

Therefore, to indicate the changes of M&A impacts upon the dependent proxies, dummy variables are created to include pre and post years. M&A control variables discussed in literature include company size, risk, the age of incorporation, toehold (whether the acquirer has any ownership prior to M&A), related industry to the target and payment methods (cash, shares or mixed). Industry and country variables are also included to form Equation 4 as below.

$$\begin{aligned}
 Div_{it} = & \beta_0 + \beta_1 Div_{i,t-1} + \beta_2 Earn_{it} + \beta_3 Earn_{it-1} + \beta_4 Year_t + \beta_5 Own_{i,t-2} + \\
 & \beta_6 GrowthSales_{it} + \beta_7 Debt_{it} + \beta_8 M\&A_{it} + \beta_{11} Country_i + \beta_{11} Industry_i + \\
 & \eta_i + \varepsilon_{it}
 \end{aligned}
 \tag{4}$$

where

$Div_{it}$  represents PP conflicts,  $i$  refers to acquiring companies and  $t$  represents the time period of effective deals. The parameter represents  $\eta_i$  as unobserved firm-specific effect and  $\varepsilon$  is the disturbance term. The PP conflicts-large shareholder

relationship has quite a number of control variables  $\beta_9$  as described in Table 6 (List of dependent and independent variables). Country and industry variables are also included in the model as indicator parameters. It is assumed that  $\epsilon$  has a zero mean, and is serially uncorrelated and independently distributed across firms but no restrictions on heteroskedasticity across time and across firms.

The dataset for the analysis does have random missing observations which cause the panel to be unbalanced or incomplete. Some of the reasons for the imbalance in the data occur because of non-availability of data in the database as explained in Section 5.1. The appropriate analysis would be to apply the unbalanced panel data models.

In this thesis however, because cross-section variations in the data are used, the coefficients of individual-invariant regressors, such as large shareholder, M&A control variables, ownership concentration dummies, country and time dummies, cannot be quantifiable. This is because the fixed effects estimator does not estimate the parameters that describe the individual-level heterogeneity. Therefore, any estimator that is time-invariant will be eliminated from the model. Hence, fixed effect or within estimator is unfeasible to provide answers to the research questions posed in this thesis.

Furthermore, all studies on relationships with dividend with corporate valuation and ownership variables contain high possibilities for endogeneity problems (Jensen et al., 1992, Pindado & Chabela, 2006). Past dividends and earnings used as regressors may also have an impact on the dividend paid in the relevant year.

Besides, all the M&A control variables may be endogenous variables since these regressors are not randomly determined (Faccio & Masulis, 2005).

This endogeneity issues will produce spurious correlation between dividend ratios and the right-hand independent variables. It will be determined that the OLS method may also be subjected to omitted variable bias because a lagged dependent variable may be correlated with firm-specific effects (Bond, Elston, Mairesse, & Mulkey, 2003).

#### **5.3.4.2            *Instrument variables (IV) estimator***

Instrumental variable (IV) estimators can be used to eliminate the endogeneity effects explained above. One of the common ways used by researcher is two-stage least squares (2SLS) estimators (Collins, Dutta, & Wansley, 2009). This method have its limitation where it is a must to specify the condition that the IV used must be correlated with the endogenous variable but uncorrelated with the error terms. Without abiding to this condition, the weak instrument may cause serious misinterpretation of coefficients (Keane & Runkle, 1992). Furthermore, the presence of heteroskedasticity may hinder the consistency in the standard IV estimates of the standard errors preventing valid inference.

Hence, without the worry of investigating valid IV, the usual and valid approach to address endogeneity and heteroskedasticity of unknown IV as suggested by Baum, Schaffer & Stillman (2003) is to use the dynamic model called Generalised Method of Moment (GMM) introduced by Hansen (1982) for the panel data analysis. The model just requires using lag data of independent variables as IV

estimators. With GMM, it is equivalent to the linear regression case and more general estimator that will construct consistent and efficient estimates in the presence of both endogeneity and heteroskedasticity.

However, the GMM framework requires the model to have sufficient time-varying variables. This is again unfeasible for this thesis because the inclusion of event study element for year 0 to indicate effective M&A. The goal of obtaining a consistent estimate of the coefficient large shareholder will fail since Fixed Effect (FE) regression method will drop time-invariant estimators from the regression, while non-random M&A control variables also will not enable the analysis to proceed with Random Effect (RE) regression method.

Another dynamic method suggested by Verbeek (2008) and Cameron & Trivedi (2009) is to use the Hausman-Taylor (HT) estimator introduced by Hausman and Taylor (1981). HT also takes into consideration the fixed effect estimator by allowing the estimation of the effect of time-invariant variables, even though they are correlated with  $\alpha_i$ . The HT estimator maintains the benefit of both the fixed effect estimator (correlation between individual effects and regressors) and also the random effect estimator (taking into account the time-invariant regressors).

### ***5.3.5 Alternative panel regression: Hausman-Taylor (HT) estimator***

The HT estimator has been advocated in various economic settings, especially to assess the impact of some of the time-invariant variables and policy-intervention in a non-random fashion (Kramer & Lensink, 2012; McPherson & Trumbull, 2008).

Verbeek (2008) states that there is no need to restrict attention to the fixed and random effects assumptions by deriving IV estimators that can be considered to be between a fixed and random effects approach. The important step in HT is to distinguish the regressors which are uncorrelated with the fixed effect and those potentially correlated with the fixed effect (or between time-varying and time-invariant regressors). A linear model with groups of variables is given as below (Hausman and Taylor, 1981):

$$y_{it} = \beta_0 + x'_{1it}\beta_1 + x'_{2it}\beta_2 + w'_{1i}\gamma_1 + w'_{2i}\gamma_2 + \alpha_i + \varepsilon_{it} \quad (5)$$

Where regressors  $x_1$  and  $w_1$  are specified to be uncorrelated  $\alpha_i$  and regressors with  $x_2$  and  $w_2$  are specified to be correlated with  $\alpha_i$ .  $w$  denotes time-invariant regressors, and  $x$  denotes time-varying regressors. These characteristics for each variable is described in Table 6. All regressors are assumed to be uncorrelated with  $\varepsilon_{it}$ . Under this assumption, the fixed effect estimator would be consistent for  $\beta_1$  and  $\beta_2$  but would not recognise the time-invariant variables.

Herewith, Hausman and Taylor (1981) suggest that equation (5) is estimated by using IV using the following variables as instruments:  $x_{1it}$ ,  $w_{1i}$  and  $x_{2it}$ ,  $w_{2i}$ , where the variables serve as their own instruments. ( $x_{2it}$  is instrumented by its deviation from individual means (as in fixed effects approach and  $w_{2i}$  is instrumented by the individual average of  $x_{1it}$ ) (Verbeek, 2008, p. 370).

Hausman and Taylor (1981) also suggest that because “the only component of the disturbance which is correlated with an explanatory variable is time invariant, then any vector orthogonal to a time-invariant vector can be used as an instrument.” (p.1384). This can also mean that any other variable can be included in as the exogenous variables for which the authors further explain that for conventional simultaneous equations (eg OLS, GLS), these variables will be excluded from the model.

The variables that can be identified as endogenous have been identified as large shareholders (Jensen et al., 1992, Pindado & Chabela, 2006), past dividends and earnings that may also have an impact on the dividend paid in the relevant year. (Faccio & Masulis, 2005). All the M&A control variables may also be treated as instruments for exogenous variables (Hausman & Taylor, 1981) since these regressors are not randomly determined.

Further check using Durbin-Watson-Hausman (DWH) test shown in Table 13, confirms that the endogenous variables include large shareholder and the lag data.

In Stata, the command *xthtaylor* (Hamilton 2009) is used to construct the regression analysis by identifying these variables as endogenous and exogenous in the model.

### ***5.3.6 Testing the appropriateness of OLS, HT: Durbin-Wu-Hausman Test***

A special test to determine which model is best to use in the case of endogeneity (past dividend and ownership) is called a Durbin-Wu-Hausman (DWH) test. Both

resulting coefficients in the OLS and HT models are compared for the null hypothesis that the OLS estimator is consistent and fully efficient.

Davidson and MacKinnon (1993) suggest Durbin-Wu-Hausman test (DWH test) to check for endogeneity among regressors. Herewith, this test is conducted by including the residuals of each endogenous right-hand side variable, as a function of all exogenous variables, in a regression of the original OLS model to check for evidence of endogeneity between PP and PA conflicts' proxies and other variables.

The DWH test takes the quadratic form (Baum, 2006) of

$$H = (\hat{\beta}_{ols} - \hat{\beta}_{alt})' D - (\hat{\beta}_{ols} - \hat{\beta}_{alt})' \quad (6)$$

And thus  $D = \text{Var}[\hat{\beta}_{ols}] - \text{Var}[\hat{\beta}_{alt}]$

“Where  $\hat{\beta}_c$  the estimator is consistent under both the null and the alternative hypothesis, and by  $\hat{\beta}_e$  the estimator that is fully efficient but inconsistent if the null is not true (Baum, 2006, pg. 211)”

The test reported in Section 7.2.2 confirms not to accept the null hypothesis and that HT estimation is appropriate to be used. However, the approach requires that the endogenous and exogenous variables be distinguished in applying economic intuition suggested by Hausman and Taylor (1981). The instruments in the procedure must also be uncorrelated with the errors and the unit effects, while correlated with the endogenous regressors. Again, like using an instrument

variable procedure, the identifying of these instruments may be a very challenging task especially when the unit effects are unobserved (Plümper & Troeger, 2007).

Fortunately, the related problems and strict limitation of estimating time-invariant in fixed effect models with unit effects has been resolved by a recent remedy that is actually more efficient than the fixed effect model and Hausman-Taylor model (Akhter & Daly, 2009; Breusch, Ward, Nguyen, & Kompas, 2010; Thomas Plümper & Vera E. Troeger, 2011). Plümper & Troeger (2007) call it “fixed effects vector decomposition” or FEVD model as superior because the estimator decomposes the unit FE into unexplained parts and a part is explained by the time-invariant or a rarely changing variable. This fits the characteristics of the ownership variable in this model as it has both characteristics of time invariant and also rarely-changing variant. (rarely changing because large shareholders seldom change in their percentage holdings).

### ***5.3.7 Alternative panel regression for robust study: Fixed-effects vector decomposition (FEVD)<sup>11</sup>***

The fixed-effects vector decomposition (FEVD) technique is suitable for a robust alternative analysis because most of the variables have very limited within variance and as such fit the traditional panel data estimators (Akhter & Daly, 2009). The model is specified with the PP proxy and is explained by a set of time-varying, time-invariant and rarely changing variables. Specifically also, there is a condition of time element at  $t=0$  that must be addressed in the variable to denote mergers and acquisition.

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<sup>11</sup> This section largely draws from Plümper & Troeger (2007; 2011) and Akhter & Daly (2009)

There are three steps in the FEVD technique:

Step 1: the procedure estimates the unit FE by running a normal FE estimate of the baseline model

Step 2: the procedure splits the unit effects into an explained and an unexplained part by regressing the unit effects on the time invariant explanatory variables of the original model and, finally,

Step 3: the procedure involves running a pooled-OLS estimation of the baseline model by including all explanatory time-invariant variables, time-invariant variables and the unexplained part of the FE vector. At this stage, a correct standard errors for the coefficients of the time-invariant variables is able to be computed and adjustments made for serial correlation of errors.

A panel data model with time-invariant variables can be defined as:

$$y_{it} = \alpha + \sum_{k=1}^K \beta_k x_{kit} + \sum_{m=1}^M \gamma_m z_{mi} + \mu_i + \varepsilon_{it} \quad (7)$$

Where the x variables are time-varying and the z variables are time invariant (including and/or rarely changing),  $\mu_i$  denotes the (N-1) unit-specified fixed effects (FE) of ownership and M&A variables,  $\varepsilon_{it}$  is the independent and identically distributed error term,  $\alpha$  is the intercept of the base unit, and  $\beta$  and  $\gamma$  are the parameters to be estimated.

The first step of FEVD is estimating the standard FE model. This FE transformation can be obtained by first averaging Equation (7) over the time period T:

$$\bar{y}_{it} = \alpha + \sum_{k=1}^K \beta_k \bar{x}_{ki} + \sum_{m=1}^M \gamma_m z_{mi} + \mu_i + \bar{e}_i \quad (8)$$

where  $\bar{y}_{it} = \frac{1}{T} \sum_{t=1}^T y_{it}$ ,  $\bar{x}_i = \frac{1}{T} \sum_{t=1}^T x_{it}$ ,  $\bar{e}_i = \frac{1}{T} \sum_{t=1}^T e_{it}$  and  $e$  stands for the residual of the estimated model. Then equation 8 is subtracted from Equation 7, which removes the unobservable individual specific-effects  $\mu_i$  and the time invariant variables  $z$ . Hence, the following is derived to obtain estimates of the unit effect  $\hat{\mu}_i$ :

$$y_{it} - \bar{y}_{it} = \beta_k \sum_{k=1}^K (x_{kit} - \bar{x}_{ki}) + \gamma_m \sum_{m=1}^M (z_{mit} - z_{mi}) + (e_{it} - \bar{e}_i) + (\mu_i - \mu_i) \quad (9)$$

$$\text{Hence, then } \hat{\mu}_i = \bar{y}_{it} - \sum_{k=1}^K \beta_k^{FE} \bar{x}_{ki} - \bar{e}_i \quad (10)$$

where  $\hat{\mu}_i$  includes all time-invariant variables, the overall constant term and the mean effects of the time varying variables.

In the second step, the  $\hat{\mu}_i$  in step 1 is regressed on the observed time-invariant,  $z$  variables to obtain the unexplained part  $h_i$  as below (the residual from regressing the unit-specific effect on the  $z$  variables):

$$\hat{\mu}_i = \sum_{m=1}^M \gamma_m z_{mi} + h_i \quad (11)$$

The unexplained part  $h_i$  is then obtained by computing the residuals from Equation (11)

$$h_i = \hat{\mu}_i - \sum_{m=1}^K \gamma_m z_{mi} \quad (12)$$

The importance of this stage is to decompose the unit effects into unexplained parts and a part that can be explained by the time-invariant variables. And finally in step 3, the full model is rerun without the unit effects but includes in the unexplained part  $h_i$  of the decomposed unit FE obtained in step 2 into pooled OLS below:

$$y_{it} = \alpha + \sum_{k=1}^K \beta_k x_{kit} + \sum_{m=1}^M \gamma_m z_{mi} + \delta h_i + \varepsilon_{it} \quad (13)$$

FEVD procedure in step 3 has few strong advantages. One is that the procedure allows for the correct standard errors (SEs) to be obtained. This is because by not correcting degrees of freedom may lead to serious underestimation of SEs and overconfidence in the results. The other advantage is that it allows for the dynamics of time-invariant variables such as the ownership, country, M&A and the acquirers' industry to be dealt with. Because of these time invariant issues, the popular dynamic Generalised Method of Moments (GMM) procedure that eliminates heteroscedasticity and serial correlation can be gained by using FEVD. For empirical investigation, the basic model is recapitulated and redefined as follows:

$$\begin{aligned} Div_{it} = & \beta_0 + \beta_1 Div_{i,t-1} + \beta_2 Earn_{i,t} + \beta_3 Earn_{i,t-1} + \beta_4 Year_t + \beta_5 LS_{i,t-2} + \\ & \beta_6 GrowthSales_{i,t} + \beta_7 Debt_{i,t} + \beta_8 M\&A_i + \beta_{10} Country_i + \beta_{11} Industry_i + \\ & \mu_i + e_{i,t} \end{aligned} \quad (14)$$

Clearly, the time invariant variables in this model are year, M&A control variables, country and industry variables.  $\mu_i$  denotes the individual specific effects while  $e_{it}$  stands for the residual of the estimated model.

However it is worth noted that there are serious limitation from the FEVD method as discussed by the critics, Greene (2010) and Breusch, Ward, Nguyen and Kompas (2010). These authors claim that the standard errors from the third stage are incorrect, in fact too small. This renders for the results derived from FEVD analysis to be not credible.

Nevertheless, FEVD technique is worthy to be used as an alternative robustness check to test the significance between large shareholder and dependent variable; especially in having the challenging data set of time-varying, time-invariant and rarely changing variables in a model. In another article, Plümper & Troeger (2011), respond to their critics' points above where they have a lengthy demonstration in their current paper that FEVD is more efficient and less biased than the fixed effects (FE), pooled ordinary least square (OLS) and random-effects (RE) for endogenous time-varying variables.

In fact, in the case of small standard errors derived from their previous paper (Plümper & Troeger 2007), they claim that

..the variance equations that Greene and BWNK suggest in their articles and we demonstrate that our variant of FEVD's variance equation computes SEs (standard errors) [sic] that are closer to the true sampling variance than the alternative suggestions of both Greene and Breusch et al. [sic]. (Plümper &

Troegeer 2011, p.148).

### 5.3.8 *Alternative panel regression for robust study: Tobit model*

For the next analysis, models using Tobit with endogenous regressor to specifically adjust for the endogeneity problem are used. This method will subsequently account for any endogeneity (Green, 1993) problem in the dividend (PP conflicts) and shareholding and adjusts for potential biases because of the presence of zero-dividend observations in the sample (Heckman, 1979).

The non-metric scale of the dependant variable requires differences in the estimation, for which the basic assumptions of regression are also applied. Logistic regression models can accommodate both types of independent variables (both metric and non-metric) and thus do not require the assumption of multivariate normality (Hair, Black, Babin, Anderson, & Tatham, 2005, p. 19).

A remedy to the problem of censoring at 0 was first proposed by Tobin (Tobin, 1958) which is known as “Tobin’s probit” or the Tobit model. Censoring is when a response variable is set to an arbitrary value when the variable is beyond the censoring point where in this study is set at 0 for zero-dividend observations.

This model can be written as such<sup>12</sup>:

$$y_i^* = x_i\beta + \mu_i$$
$$y_i = \begin{cases} 0 & \text{if } y_i^* \leq 0 \\ y_i^* & \text{if } y_i^* > 0 \end{cases} \quad (15)$$

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<sup>12</sup> This section draws from Baum (2006, p. 263) and Chang (2011).

Where  $y_i$  contains either zeros for dividend or a positive amount for corporations in Asean 5 countries. The limitation of the panel data model is that the estimation of limited dependent variable models are characterised by the lagged dependent variables and serially correlated errors. To solve this, a dynamic Tobit model is applied by incorporating the time-invariant, time-varying and time-dummy (Chang, 2011).

Hence, the dynamic panel data framework in the Tobit model with lagged latent dependent variable is described as follows:

$$y_i^* = x_{it}\beta + y_{i,t-1}^*\lambda + c_i + \mu_{it} \quad (16)$$

$$y_i = \{y_{it}^*, 0\}, \quad t = 1, \dots, T, i = 1, \dots, N$$

$c_i$  is an unobserved individual specific random disturbance which is constant over time, and  $\mu_{it}$  is an idiosyncratic error which varies across time and individuals.

The general model incorporating the non-continuous dependent model is as follows ( Fama & French, 2001; Truong & Heaney, 2007):

$$\begin{aligned} Div_{it} = 1 = \text{Logit} [\beta_0 + \beta_1 Div_{i,t-1} + \beta_2 Earn_{i,t} + \beta_3 Earn_{i,t-1} + \beta_4 Year_t + \\ \beta_5 LS_{i,t-2} + \beta_6 GrowthSales_{i,t} + \beta_7 Debt_{i,t} + \beta_8 M\&A_i + \beta_{10} Country_i + \\ \beta_{11} Industry_i + V_{it}] \end{aligned} \quad (17)$$

## 5.4 Specification tests and model diagnostics

### 5.4.1 Estimation of standard errors

Reliable forecast values are measured by the closest predicted values of dependent variables  $Y$  (estimated line) from the true values of  $Y$  (true line). This means the smaller the variance of the residuals, the better the forecast will be.

There are two types of residual errors that may occur in a panel data set: time-series dependence and cross-sectional dependence (Wooldridge, 2007). In the first type of error the residuals of a given company may be correlated across years or unobserved company, or alternatively, the residuals of a given year may be correlated across different companies.

Analyses using HT and FEVD estimators take into consideration the fixed effect estimator by allowing the estimation effect of time-invariant variables, even though they are correlated with  $\alpha_i$ . The HT estimator maintains the benefit of both the fixed effect estimator (correlation between individual effects and regressors) and also the random effect estimator (taking into account the time-invariant regressors).

### 5.4.2 Testing several coefficients jointly (the Wald test)

The most common test to decide on the adequacy of a model or the joint significance of several regression coefficients is a Wald-test approach (Cameron & Trivedi, 2009). Wald test is an alternative way of testing a multivariate hypothesis, other than an F test. Sometimes it has the advantage over F-test

because of its ability to estimate one model, the unrestricted model (the hypothesis does not impose any mathematical restriction to the model) such as in this thesis.

The following is the Wald statistic:

$$\frac{(\hat{\theta} - \theta_0)^2}{\text{var}(\hat{\theta})} \quad (18)$$

Where the maximum likelihood estimate (MLE) of  $\hat{\theta}$  of the parameter(s) of interest  $\theta$  is compared with the proposed value  $\theta_0$ , with the assumption that the difference between the two will be approximately normally distributed. In statistics, maximum-likelihood estimation (MLE) is a method of estimating the parameters of a statistical model. When applied to a data set and given a statistical model, maximum-likelihood estimation provides estimates for the model's parameters.

Herewith, the square of the difference is then compared to a chi-squared distribution. In probability statistics, the chi-squared distribution (also chi-square or  $\chi^2$  distribution) with  $k$  degrees of freedom is the distribution of a sum of the squares of  $k$  independent standard normal random variables. By the central limit theorem, because the chi-squared distribution is the sum of  $k$  independent random variables with finite mean and variance, it converges to a normal distribution for large  $k$ . For many practical purposes, for  $k > 50$  the distribution is sufficiently close to a normal distribution for the difference to be ignored (Box, Hunter, & Hunter, 2006, p. 46).

If the results of the Wald test are significant, this will indicate that the group of explanatory variables (in this study, these are large shareholder, second large shareholder, M&A and financial control variables) have parameters that are not zero. Therefore, all the explanatory variables can be included in the models. If the Wald test is not significant then the model formulation needs to be redesigned, excluding variables with zero parameters. Results from the corresponding Wald tests will be reported for each analysis in the empirical result sections.

#### **5.4.3 *Multicollinearity test***

When there is a perfect linear relationship between the explanatory variables, called multicollinearity, the estimates for a regression model cannot be computed. In this condition, as the degree of multicollinearity increases, the regression model estimates become more unstable and the standard errors for the coefficient becomes uncontrollably inflated.

This multicollinearity problem in post regression can be detected by applying Variance Inflation Factor (VIF) statistics (Hamilton, 2009). VIF can indicate whether a predictor has a strong linear relationship with the other predictor in the regression model<sup>13</sup>.

There will be two results produced from this procedure; VIF and 1/VIF. The latter, called tolerance statistic, gives values equal  $(1-R^2)$  that generates the proportion of an x variable's variance independent of all the other x variables. From these values, guidelines suggested by Chatterjee, Hadi & Price (2000) to

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<sup>13</sup> In Stata, the command *estat vif* is used.

detect the presence of multicollinearity are for VIF value greater than 10 or when the mean of VIF is larger than 1. To test for multicollinearity among predictor variables, both VIF and tolerance statistic will be calculated.

#### ***5.4.4 Autocorrelation/Serial correlation test***

Serial correlation occurs in cases where covariances between error terms are not equal to zero, which means that residuals appear to be correlated with each other. Command *xtserial* in Stata implements a test for serial correlation in the idiosyncratic errors of a linear panel-data model discussed by Drukker (2003). An equivalent Wald test of this hypothesis will produce under the null of no serial the residuals from the regression of the first-differenced variables should have an autocorrelation of -.5. This issue happens quite often in time-series data where the regression results remain unbiased but become inefficient and the standard errors are estimated in the wrong way (Verbeek, 2008).

### **5.5 Summary**

This chapter has outlined the methodology used for analysis to test the hypotheses in Chapter 4 of this study. It has highlighted the variables and measurement to be used in the study, including the challenges faced during the exercise. Sample selection criteria have also been discussed. The methods and tests that were used to verify the postulated hypotheses and model specifications have also been outlined.

Methods used for analysis include fixed effects in OLS and panel Tobit to analyse the dependent model of dummy variables. Alternative regression models; Hausman-Taylor (HT) and Fixed Effect Decomposition Vector (FEVD) have been discussed thoroughly. These methods are necessary for the analysis, as opposed to OLS, because of the availability of time-invariant variables and endogeneity problems that could distort the OLS results. The sample characteristics of sample results of the regression analyses and findings are presented in the next chapter.

## **CHAPTER 6: FINDINGS FOR PP CONFLICTS IN ASEAN 5**

### **M&A: UNIVARIATE ANALYSIS**

#### **6.0 Introduction**

The previous chapter discussed the methodology used and the sample selection criteria in the study. This chapter continues with the analysis and the results of the empirical study of PP conflicts and the variables in Asean 5 M&A.

This chapter is organised as follows. Section 6.1 provides descriptive statistics for the sample data, with detailed analysis of year and country. This is followed by presentation of pair wise correlation results of variables in Section 6.2. Section 6.3 provides changes in proxies for PP conflicts and PA conflicts by year and country. Section 6.4 summarises the main findings from this chapter.

#### **6.1 Description of final sample**

Table 7 is a summary of deals in the final sample when compared with the actual effective deals and values of M&A in Asean 5 region that was shown in Table 2. Meanwhile, the pie chart in Figure 7 depicts the percentages of effective deals in the final sample taken for consideration in the analysis.

Column A of Table 7 presents the actual effective deals in Asean 5 from the year 2000 to 2008 taken from SDC database, Column B shows the effective deals of the sample taken to conduct the analyses for this study and Column C is the total

percentage of the final sample collected out of the actual number of effective deals in the region.

Table 7 : Percentage of deals in sample from the effective deals in Asean 5 for the period of Year 2000-2008

Nation	A		B		C
	1	2	3	4	5
	Actual number of effective deals	Percent	Effective deals in final sample	Percent	Percentage of final sample from the actual effective deals (B/A)
Indonesia	144	3%	21	2%	15%
Malaysia	2,196	52%	595	59%	27%
Philippines	187	4%	18	2%	10%
Singapore	1,333	31%	313	31%	23%
Thailand	393	9%	66	7%	17%
<b>Total</b>	<b>4,253</b>	<b>100%</b>	<b>1,013</b>	<b>100%</b>	<b>24%</b>

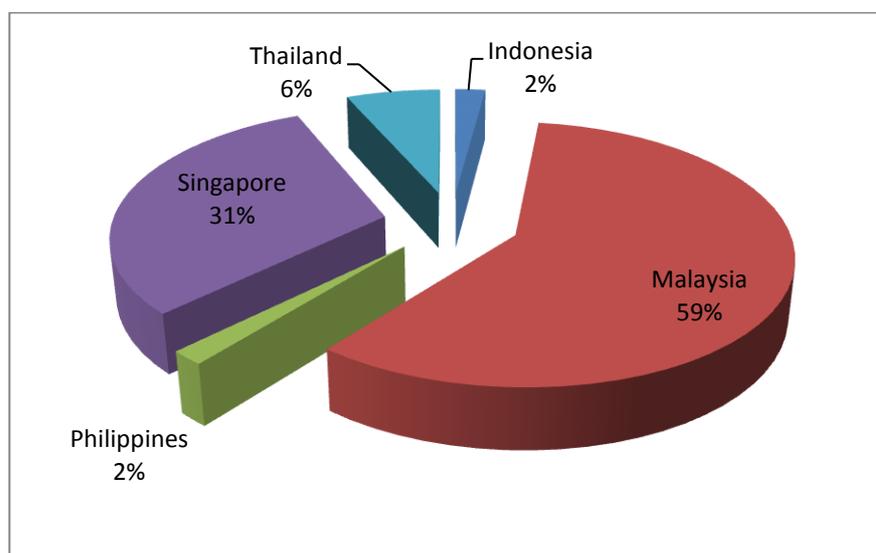
Note: Thomson Reuters. (n.d.).  
Retrieved from SDC Thomson Database.

Column B shows that Malaysia has the highest percentage available for this study at 59%, while Singapore is at 31%. The total effective deals that are available in the sample for Indonesia (2%) and Philippines (2%) show that these figures are a concern as they are lower than the minimum required for statistical analysis of 30. This will be further addressed in the method section by either combining the two countries or dropping them out of the equation to produce some comparable results for analysis.

Column C shows that the percentage of the final sample collected for the study is 24% out of the total actual effective deals in Asean 5. The highest numbers and percentage of effective deals taken in the sample are from Malaysia (27%) and

Singapore (24%), which also had the highest number of actual effective deals during that period, as shown in Column A2 at 52% (Malaysia) and 31% (Singapore). After elimination, the lowest number of effective deals available for sampling is from Philippines (10%).

In addition, Column C shows that even though figures in some countries in Column B seem to be relatively low, they are still comparable with the percentage of actual number of effective deals shown in Column A that accounts for overall M&As in Asean 5 countries. Hence, the weightings of the sample and actual for the analysis to be derived from this thesis should be able to generalise the outcome for Asean 5.



*Figure 7: Percentage of effective deals in the final sample in Asean 5 (2000-2008)*

## **6.2 Descriptive results: Characteristics of the bidding firms**

The sample consists of 807 company acquirers and up to 6,400 observations of panel data within the period 2000 to 2008. Three main characteristics of the

acquirers are discussed in this section. The first characteristic of the overall sample is discussed shown in Table 8. The table depicts the number of observations, mean, standard deviation, median, minimum and maximum value of each variable. For most data, including dividend ratios used in this research, the top and bottom 10% percentile of ratios are cross-checked manually with published annual reports to establish correct figures.

There are three categories for independent variables: the first category is the largest shareholders variable (also known as controlling shareholders), the second category is control variables and the third category is M&A control variables. The second discussion is about characteristics by country (Appendix 3); and the third characteristic, by year, is shown in Table 9.

Table 8: Descriptive statistics of dependent and independent variables

Variables	Obs	Mean	Std. Dev.	Median	Min	Max
<b>Dependent variables</b>						
Div/cf	6283	17.375	33.221	8.952	-206.160	417.205
Div/earn	6362	0.145	0.598	0.070	-13.070	13.020
Div/sales	6399	0.655	2.401	0.009	0.000	19.219
Div/mcap	6411	0.246	0.025	0.014	0.000	1.127
Efficiency Ratio	6400	0.871	0.685	0.748	0.000	13.685
Tobin's q	6131	0.963	0.967	0.710	-.0612	10.9455
<b>Independent variables</b>						
<b>Ownership variables</b>						
Largest shareholder (%)	912	32.015	18.598	27.645	5.000	87.700
Second large shareholder (%)	926	10.578	7.833	8.560	1.000	36.710
Concen 5	1013	0.049	0.217	0.000	0.000	1.000
Concen 10	1013	0.221	0.415	0.000	0.000	1.000
Concen 20	1013	0.213	0.410	0.000	0.000	1.000
Concen 30	1013	0.140	0.347	0.000	0.000	1.000
Concen 40	1013	0.120	0.326	0.000	0.000	1.000
Concen 50	1013	0.227	0.419	0.000	0.000	1.000

<b>Variables</b>	<b>Obs</b>	<b>Mean</b>	<b>Std. Dev.</b>	<b>Median</b>	<b>Min</b>	<b>Max</b>
<b><u>Control variables</u></b>						
CF/Sales	6385	81532	2332811	778346	-50692	124000000
1 yearGrowthSales	6155	18.165	60.48	10	-100	928.49
LnTotalAssets	6417	18.507	1.67	18.24	3.275	24.86686
Ln Total Sales	6525	18.066	1.76	17.93	8.38	24.87
Total Debt/Total Assets	6415	24	30	20	0	1027
Long Term Dept/Capital	6190	15	47	8	0	373
Risk (Beta)	5465	1.0061	0.8047	0.9400	-2.3074	5.8476
Age	6793	19	15	15	1	109
<b><u>M&amp;A Variables</u></b>						
Value of Transactions	3039	1.265	1.97	0.757	0.523	3.164
PaymentCash	406	0.414	0.493	0.000	0.000	1.000
PaymentShare	325	0.331	0.471	0.000	0.000	1.000
PaymentMixed	203	0.207	0.405	0.000	0.000	1.000
Related SIC Dummy (Toehold)	130	0.128	0.335	0.000	0.000	1.000
dToehold(5%)	1013	0.768	0.422	1.000	0.000	1.000
dToehold(10%)	1013	0.003	0.054	0.000	0.000	1.000
dToehold(20%)	1013	0.007	0.083	0.000	0.000	1.000
dToehold(30%)	1013	0.016	0.125	0.000	0.000	1.000
dToehold(40%)	1013	0.016	0.125	0.000	0.000	1.000
dToehold(50%)	1013	0.191	0.393	0.000	0.000	1.000
<b><u>Industry dummies</u></b>						
SIC 1 (Food)	1013	0.115	0.318	0.000	0.000	1.000
SIC 2 (Mining &Minerals)	1013	0.006	0.077	0.000	0.000	1.000
SIC 3(Oil&Petroleum)	1013	0.023	0.149	0.000	0.000	1.000
SIC 4(Textiles)	1013	0.029	0.167	0.000	0.000	1.000
SIC 5(ConsumerDurables)	1013	0.048	0.215	0.000	0.000	1.000
SIC 6(Chemicals)	1013	0.045	0.208	0.000	0.000	1.000
SIC 7 (Drugs,Soap, Perfumes&Tobacco)	1013	0.026	0.158	0.000	0.000	1.000
SIC 8(Construction &Cons.Materials)	1013	0.110	0.312	0.000	0.000	1.000
SIC 9(Steel)	1013	0.047	0.212	0.000	0.000	1.000
SIC 10(Fabricated Products)	1013	0.012	0.108	0.000	0.000	1.000
SIC 11(Machinery& BusEquipment))	1013	0.086	0.280	0.000	0.000	1.000
SIC 12(Automobiles)	1013	0.032	0.175	0.000	0.000	1.000
SIC 13(Transportation)	1013	0.077	0.267	0.000	0.000	1.000
SIC 14(Retail Stores)	1013	0.028	0.164	0.000	0.000	1.000
SIC 15(OtherSupplies)	1013	0.318	0.466	0.000	0.000	1.000

### **6.2.1 Dividend**

At the beginning stage, both parametric (one way *t test*) and non-parametric (kruskal-wallis test) are done to check whether the sample means and medians of dependent and independent variables differ from year to year pre- and post-M&A as shown in Appendix 4. There are significant changes in the differences for each variable (chi-square probability at 1% level).

The most striking result is that the overall minimum dividend cash flow is at negative USD206 while the maximum is USD417 per cash flow with a standard deviation of 33.2. Appendix 3 (by country) points out that the minimum payout per earnings is in Malaysia while the highest is in Singapore. The average dividend per cash flow in Asean 5 is at USD17 per dollar of cash flow. Malaysia and Singapore record the highest average at a ratio of 8.8 and 6.4 consecutively.

For dividend per earnings ratio, the average of dividend earnings ratio is recorded at 14.5% of earnings. The minimum is at negative USD13 per dollar of earnings while the maximum is at a similar degree of positive USD13. Similar to dividend per cash flow, Malaysia holds the least payout per earnings while Singapore the most. Overall in Asean 5, the small variation for earnings as indicated by the standard deviation of 0.6 shows that companies in Asean 5 pay relatively similar dividends out of their companies' earnings.

Both ratios using dividend to sales and to market capitalisation present almost similar values with minimum at 0 payouts. Companies on average pay about USD0.66 to USD0.25 per dollar in sales and market capitalisation. Singapore

being the most developed of the five nations pays the highest dividend at USD19 per \$1 of sale and USD1 per market capitalisation.

There are high numbers of non-dividend paying companies similar to other studies on dividend payouts (Bahng, Lee, & Jeong, 2011). It is expected that low profitability companies are less inclined to pay dividends, which needs further investigation.

### **6.2.2 *Asset utilisation ratio (Efficiency ratio)***

The mean efficiency ratio (ratio of total sales to total assets) is 0.9 for overall companies. A ratio of higher than 1 depicts efficient use of the companies' total invested asset. This implies that companies in Asean 5 are relatively less efficient in running their assets. The maximum is at 13.7 while the minimum is 0. By analysing the ratio in different countries, as shown in Appendix 3, the highest ratio goes to Singapore (13.7) and second to Malaysian companies (7.9). The lowest efficiency ratio is Indonesian companies at 2.6.

### **6.2.3 *Performance ratio (Tobin's q)***

The overall Tobin's q mean value is 0.95. This is much closer to value 1.0, and indicates public limited companies in Asean 5 create value for their shareholders. The maximum q is 10.946 while the minimum is -0.06. Table 9 shows that when compared yearly, the performance slightly dropped from the average of 1 before M&A to 0.94 after M&A.

Further analysis of Tobin's q by individual country, presented in Appendix 3, shows that the highest average Tobin's q is a Malaysian company (0.53) and the lowest Tobin's q is in a Philippines (0.01) company.

#### ***6.2.4 Large, controlling shareholdings***

Overall, Table 8 shows that the average largest shareholding is 32% while the second largest shareholder is 11%. This average figure answers the first research question in this study. The maximum percentage of shares owned by one entity of shareholder is 88% and the second shareholder is 37%. This picture confirms that shareholding in Asean 5 countries is highly concentrated consistent with other studies (Claessens, et al., 2000b; Faccio, et al., 2001b).

Appendix 3 shows that the percentage of large shareholders is highest in Singapore (87.7%), second is Indonesia (87.3%), and third is in Philippines (81.3%), followed by Thailand (79.7%) and Malaysia (79%). The concentration dummies also portray that about 68% (standard deviation: 21%+14%+12%+21%) of companies contain 20% or more control of the shares.

Looking at the concentration dummies, the highest number of concentrations is for 50% and above that has the average of 22.7% of the total sample taken. This reiterates the highly concentrated phenomena among companies in Asia. The second most concentrated threshold is at 10% and above shareholdings.

### **6.2.5 Company size**

As part of a control variable, the size of companies measured in total assets must be added in the analysis. In this sample, the overall average logs for total assets are at 18 (USD560 million). By analysing the companies' size by year, Table 9 reveals that the average size before the M&A on average is USD447 million with the maximum at USD21 billion in total assets. After M&A, sizes of the companies are increased to USD646 million. Total sales also show similar a pattern with average sales increasing from USD315 million to USD525 million. This shows that companies do grow in size; one of the main reasons to embark on M&A.

### **6.2.6 Cash flows**

There are negative cash flows reported in some of the companies. The average cash flow per total asset and total sales are USD5.9 million and USD0.82million respectively. The existence of huge variations in cash flows is an interesting point for further investigation as financial analysts do refer to cash flow standings of a company to evaluate investment projects (Smart & Megginson, 2008).

When compared by year, as depicted in Table 9, it is noted that the average cash flows of companies fall from USD132.9 million to USD61.3million after M&A. Table 9 also reports that there is a large sum of cash flows in the second year before M&A (mean of USD310 million), where it drops dramatically a year before M&A to USD48.3million.

### **6.2.7 Leverage**

Total debt per total asset ratio of companies in the sample is, on average, 24 overall. This is a little bit higher than the value reported by G7 countries at an average of 20 (Rajan & Zingales, 1995). The minimum value of debt to assets ratio is zero, indicating there is existence of total equity companies in the listed companies in Asean 5 countries. This is quite common in some other developing markets (Wellalage, 2012) There also seems to be on average an increase in leverage post-M&A as shown in Table 9 (from 24.71 to 25.60). Further investigation in t-test analysis will discover whether these changes are significant or otherwise.

### **6.2.8 Growth**

The average growth among the companies is at the rate of 3.66% with the lowest at a negative 100%. With this large variation, again it is interesting to know whether differences in growth have any impact before and after M&A, which calls for further testing. When compared with the yearly growth, Table 9 shows that the average growth decreased from 18.79% to 15.62% after M&A. Nevertheless, the highest growth is depicted in the first year after the M&A at increased sales of 22.17%.

### **6.2.9 Age**

The average age of incorporation for the companies until the effective year of M&A is 19 years with a median of 15 years. The youngest company is one year old while the oldest is 109.

### ***6.2.10 M&A: Payment methods and related targets***

There are 41% of companies paying cash for their M&A, 33% using shares and 20% using a mix of both cash and share payments. It is also noted that only 13% of the companies are industry-related to their target companies.

### ***6.2.11 M&A: Toehold***

It is interesting to note that out of 1,013 sample, 77% of the acquirers have already owned 5% or more of the target companies. And about 19% of the acquirers do actually own more than 50% of the target companies before M&A. This may indicate that the acquirers have already built a close relationship with the target companies before acquiring at a higher percentage.

### ***6.2.12 M&A: Value of transactions***

The average value of transactions for the M&A companies in Asean 5 is reported at USD1.3million at a standard deviation of 2. The minimum total recorded for a transaction is USD0.8 million and the highest is USD3.16 million in value. When compared with the individual countries in Appendix 3, it is reported that the lowest total value is in Malaysia at USD1 million and highest is Singapore at USD3.2million.

### ***6.2.13 Industries***

Fifteen industries represent all industries in Asean 5 (except for the financial sector): The highest percentage of participation in M&A is from other supplies (31.8%) which includes services industries, followed by food (11.5%) and

construction (11%). This is in line with what was reported by Metwalli & Tang (2002), that manufacturing (including food and construction) and services account for 50% of the total M&A industries in Asean 5 countries.

Table 9: Descriptive statistics of companies by year

	N	Mean	Median	Minimum	Maximum	Skewness
<b>Performance (Tobin's q)</b>						
tobin~_3	786	0.98	0.71	- 0.06	9.32	4.267
tobin~_2	872	1.02	0.75	0.00	10.61	3.903
tobin~_1	929	1.01	0.71	0.00	10.62	4.062
<b>Average</b>		<b>1.00</b>	<b>0.72</b>	<b>- 0.02</b>	<b>10.18</b>	<b>4.08</b>
tobinsq1	950	0.91	0.72	0.08	9.66	5.015
tobinsq2	929	0.93	0.69	0.12	10.95	5.564
tobinsq3	721	0.99	0.68	0.00	10.60	4.302
<b>Average</b>		<b>0.94</b>	<b>0.70</b>	<b>0.07</b>	<b>10.40</b>	<b>4.96</b>
<b>Company Size (Total Assets)</b>						
ta_3	618	413,000,000	77,200,000	264,600	15,800,000,000	7.94
ta_2	619	440,000,000	80,000,000	163,915	20,800,000,000	9.38
ta_1	603	488,000,000	89,500,000	586,823	26,500,000,000	10.21
<b>Average</b>		<b>447,000,000</b>	<b>82,233,333</b>	<b>338,446</b>	<b>21,033,333,333</b>	<b>9.18</b>
ta1	555	602,000,000	94,600,000	2,376,337	29,200,000,000	8.96
ta2	592	635,000,000	110,000,000	2,754,904	32,800,000,000	9.15
ta3	609	702,000,000	116,000,000	3,440,847	40,900,000,000	10.44
<b>Average</b>		<b>646,333,333</b>	<b>106,866,667</b>	<b>2,857,363</b>	<b>34,300,000,000</b>	<b>9.52</b>
<b>Company Size (Total Sales)</b>						
sales_3	821	280000000	49400000	43092	16600000000	10.054
sales_2	910	310000000	49800000	31972	22700000000	11.151
sales_1	957	355000000	50700000	6842	33600000000	13.650
<b>Average</b>		<b>315000000</b>	<b>49966667</b>	<b>27302</b>	<b>24300000000</b>	<b>11.62</b>
sales1	973	457000000	63800000	58007	57500000000	17.768
sales2	960	519000000	73300000	33082	47600000000	13.037
sales3	932	599000000	79900000	4354	63000000000	14.321
<b>Average</b>		<b>525000000</b>	<b>72333333</b>	<b>31814</b>	<b>56033333333</b>	<b>15.04</b>
<b>Cash Flows</b>						
cf_3	821	40,400,000	3,868,239	- 361,000,000	4,150,000,000	13.104
cf_2	910	310,000,000	49,800,000	31,972	22,700,000,000	11.151
cf_1	958	48,300,000	4,587,964	- 112,000,000	3,810,000,000	11.292
<b>Average</b>		<b>132,900,000</b>	<b>19,418,734</b>	<b>- 157,656,009</b>	<b>10,220,000,000</b>	<b>11.85</b>

cf1	970	55,300,000	5,206,713	- 171,000,000	4,250,000,000	10.212
cf2	959	64,300,000	5,980,479	- 201,000,000	3,410,000,000	8.599
cf3	921	64,300,000	6,285,809	- 5,270,000,000	4,460,000,000	2.404
<b>Average</b>		<b>61,300,000</b>	<b>5,824,334</b>	<b>- 1,880,666,667</b>	<b>4,040,000,000</b>	<b>7.07</b>
<b>Leverage (Total debt to Total Assets)</b>						
tdta_3	741	24.66	22.22	0.00	163.47	1.249
tdta_2	806	24.75	20.67	0.01	367.08	5.268
tdta_1	862	24.72	20.85	0.00	963.55	18.870
<b>Average</b>		<b>24.71</b>	<b>21.25</b>	<b>0.01</b>	<b>498.03</b>	<b>8.46</b>
tdta1	916	24.88	22.40	0.00	314.68	4.835
tdta2	918	25.49	22.13	0.01	307.18	3.701
tdta3	891	26.44	22.65	0.04	612.53	11.217
<b>Average</b>		<b>25.60</b>	<b>22.39</b>	<b>0.01</b>	<b>411.46</b>	<b>6.58</b>
<b>Growth (sales growth)</b>						
SalesGrt_3	701	19.38	8.28	-100	870.59	5.31
SalesGrt_2	807	15.57	8.47	-100	499.07	3.36
SalesGrt_1	890	21.42	10.36	-100	928.49	6.38
<b>Average</b>		<b>18.79</b>	<b>9.03</b>	<b>- 100.00</b>	<b>766.05</b>	<b>5.02</b>
SalesGrt1	945	22.17	11.17	-96.45	716.39	4.72
SalesGrt2	947	14.17	8.11	-98.48	443.06	3.33
SalesGrt3	924	10.52	7.84	-100	481.17	3.06
<b>Average</b>		<b>15.62</b>	<b>9.04</b>	<b>- 98.31</b>	<b>546.88</b>	<b>3.71</b>

### 6.3 Pair wise correlation results

A pair wise correlation matrix between the dependent and independent variables in the study is shown in Table 10. The highest correlation is 51.14% between dividend to cash flow and dividend to market capitalisation ratios. All the dividend ratios and efficiency ratios are shown to be significantly correlated with each other, which illustrates their tendency to vary together.

Going down the table, PP proxies for dividend (except for dividend to sales ratio) show positive and significant correlation coefficients with concentrated ownership consisting of large shareholders, large shareholder square and second large shareholders. This may offer strong support to the preliminary hypothesis that there is evidence of PP conflicts when there are large shareholdings within companies in Asean 5 during M&A.

However, ratios of dividend to sales perform differently and do not significantly correlate with the concentrated shareholders' variable. Performance measurement using Tobin's q is only significantly correlated with the large shareholders square variable. The asset utilisation ratio to proxy PA agency cost is also not correlated as expected with the large shareholder variables. Further tests need to be done to understand these relationships.

Table 10: Pair-wise Correlation Matrix

	AssetUtil	Div/cf	Div/earn	Div/sales	Div/mcap	Tobin's q
AssetUtil	1.0000					
Div/cf	<b>0.0251**</b> <b>(-0.048)</b>	1.0000				
Div/earn	0.0033 <b>(-0.7917)</b>	<b>0.2861***</b> <b>(0.0000)</b>	1.0000			
Div/sales	<b>-0.0583*</b> <b>(0.0000)</b>	<b>0.1446***</b> <b>(0.0000)</b>	<b>0.1168***</b> <b>(0.0000)</b>	1.0000		
Div/mcap	<b>0.0653*</b> <b>(0.0000)</b>	<b>0.5114***</b> <b>(0.0000)</b>	<b>0.3592***</b> <b>(0.0000)</b>	<b>0.2490***</b> <b>(0.0000)</b>	1.0000	
Tobin's q	0.0150 <b>(0.2490)</b>	<b>0.0579***</b> <b>(0.0000)</b>	0.0157 <b>(0.2305)</b>	<b>0.0317**</b> <b>(0.0153)</b>	-0.0179 <b>(0.1695)</b>	1.0000
Lag Divcflow	0.0099 <b>(0.4453)</b>	<b>0.2676***</b> <b>(0.0000)</b>	<b>0.1276***</b> <b>(0.0000)</b>	<b>0.0305**</b> <b>(0.0188)</b>	<b>0.1796***</b> <b>(0.0000)</b>	0.0066 <b>(0.6157)</b>
Lag Divearn	0.0042 <b>(0.7467)</b>	<b>0.1340***</b> <b>(0.0000)</b>	<b>0.1092***</b> <b>(0.0000)</b>	0.0030 <b>(0.8154)</b>	<b>0.1058***</b> <b>(0.0000)</b>	<b>0.0293*</b> <b>(0.0272)</b>
Lag Divsales	<b>-0.0630***</b> <b>(0.0000)</b>	<b>0.1182***</b> <b>(0.0000)</b>	<b>0.0512***</b> <b>(0.0001)</b>	<b>0.0360***</b> <b>(0.0052)</b>	<b>0.1250***</b> <b>(0.0000)</b>	-0.0061 <b>(0.6485)</b>
Lag DivMcap	0.0628*** <b>(0.0000)</b>	<b>0.1761***</b> <b>(0.0000)</b>	<b>0.1299***</b> <b>(0.0000)</b>	<b>0.0260**</b> <b>(0.0432)</b>	<b>0.2300***</b> <b>(0.0000)</b>	0.0129 <b>(0.3323)</b>
LargeShareholder	0.0158 <b>(0.4310)</b>	<b>0.0653**</b> <b>(0.0011)</b>	<b>0.0736***</b> <b>(0.0002)</b>	0.0042 <b>(0.8331)</b>	<b>0.0647**</b> <b>(0.0011)</b>	0.0260 <b>(0.1967)</b>
SecondLarge	0.0203 <b>(0.3074)</b>	<b>0.0576**</b> <b>(0.0038)</b>	<b>0.0530**</b> <b>(0.0077)</b>	0.0248 <b>(0.2097)</b>	<b>0.0646**</b> <b>(0.0011)</b>	-0.0061 <b>(0.7599)</b>
Lshipsquare	0.0226 <b>(0.2359)</b>	<b>0.0935***</b> <b>(0.0000)</b>	<b>0.0687***</b> <b>(0.0003)</b>	-0.0001 <b>(0.9972)</b>	<b>0.0561***</b> <b>(0.0029)</b>	<b>0.0531*</b> <b>(0.0054)</b>
L2nshipSquare	0.0114 <b>(0.5488)</b>	0.0105 <b>(0.5800)</b>	0.0156 <b>(0.4128)</b>	0.0157 <b>(0.4071)</b>	<b>0.0311*</b> <b>(0.0990)</b>	<b>0.0818*</b> <b>(0.0000)</b>
Profitability	-0.0203 <b>(0.1078)</b>	<b>0.0498***</b> <b>(0.0001)</b>	0.0117 <b>(0.3554)</b>	0.0126 <b>(0.3202)</b>	<b>0.0561***</b> <b>(0.0000)</b>	<b>0.0583*</b> <b>(0.0000)</b>
LagProfitability	-0.0193 <b>(0.1359)</b>	<b>0.0606***</b> <b>(0.0000)</b>	0.0128 <b>(0.3213)</b>	0.0182 <b>(0.1586)</b>	<b>0.0606***</b> <b>(0.0000)</b>	<b>0.0649*</b> <b>(0.0000)</b>
cashtota	<b>-0.0574***</b> <b>(0.0000)</b>	-0.0042 <b>(0.7552)</b>	0.0050 <b>(0.7143)</b>	<b>0.0371*</b> <b>(0.0060)</b>	-0.0075 <b>(0.5758)</b>	-0.0022 <b>(0.8735)</b>
cftosales	-0.0003 <b>(0.9817)</b>	-0.0022 <b>(0.8645)</b>	-0.0018 <b>(0.8843)</b>	-0.0029 <b>(0.8186)</b>	-0.0127 <b>(0.3141)</b>	0.0542* <b>(0.0000)</b>
tdta	<b>-0.0248**</b> <b>(0.0476)</b>	<b>-0.1142***</b> <b>(0.0000)</b>	<b>-0.0485***</b> <b>(0.0001)</b>	<b>-0.0446***</b> <b>(0.0004)</b>	<b>-0.0719***</b> <b>(0.0000)</b>	0.0175 <b>(0.1779)</b>
lnTA	<b>-0.0261***</b> <b>(0.0370)</b>	<b>0.0514***</b> <b>(0.0001)</b>	0.0133 <b>(0.2916)</b>	0.0142 <b>(0.0000)</b>	0.0533*** <b>(0.0000)</b>	0.0206 <b>(0.1124)</b>
lnsale	<b>0.2205***</b> <b>(0.0000)</b>	<b>0.1426***</b> <b>(0.0000)</b>	<b>0.0677***</b> <b>(0.3488)</b>	0.0012 <b>(0.9269)</b>	<b>0.1514***</b> <b>(0.0002)</b>	<b>0.0216*</b> <b>(0.0994)</b>
Taxrate	-0.0067 <b>(0.6478)</b>	-0.0143 <b>(0.3370)</b>	<b>0.0395**</b> <b>(0.0076)</b>	-0.0062 <b>(0.6751)</b>	<b>0.0510***</b> <b>(0.0006)</b>	<b>-0.0302*</b> <b>(0.0462)</b>
sales1ygrth	-0.0142 <b>(0.2736)</b>	-0.0009 <b>(0.9432)</b>	-0.0029 <b>(0.8251)</b>	-0.0010 <b>(0.9375)</b>	-0.0099 <b>(0.4466)</b>	-0.0076 <b>(0.5706)</b>
lnAge	<b>-0.0682***</b> <b>(0.0000)</b>	<b>0.1047***</b> <b>(0.0000)</b>	<b>0.0625***</b> <b>(0.0000)</b>	<b>0.0492***</b> <b>(0.0004)</b>	<b>0.1007***</b> <b>(0.0000)</b>	<b>-0.0331***</b> <b>(0.0208)</b>
lnValueTrans	<b>-0.1077***</b> <b>(0.0000)</b>	-0.0149 <b>(0.5434)</b>	-0.0048 <b>(0.8443)</b>	<b>0.0916***</b> <b>(0.0002)</b>	<b>0.0520**</b> <b>(0.0321)</b>	<b>-0.0331*</b> <b>(0.0208)</b>
PayMethod1	-0.0104 <b>(0.5935)</b>	<b>-0.0842***</b> <b>(0.0000)</b>	<b>-0.0392**</b> <b>(0.0430)</b>	-0.0078 <b>(0.6832)</b>	<b>-0.0830***</b> <b>(0.0000)</b>	<b>-0.0333*</b> <b>(0.0859)</b>
PayMethod2	0.0002 <b>(0.9928)</b>	<b>0.0524*</b> <b>(0.0067)</b>	<b>0.0473**</b> <b>(0.0146)</b>	-0.0091 <b>(0.6353)</b>	<b>0.0588**</b> <b>(0.0022)</b>	0.0312 <b>(0.1078)</b>

PayMethod3	<b>0.0710*</b>	0.0033	0.0302	0.0265	0.0100	<b>-0.0544**</b>
	<b>(0.0004)</b>	(0.8713)	(0.1350)	(0.1937)	(0.6064)	<b>(0.0048)</b>
RelatedInd1	0.0232	-0.0173	-0.0049	-0.0040	0.0101	<b>0.0372*</b>
	(0.2238)	(0.3624)	(0.7967)	(0.8339)	(0.5912)	<b>(0.0515)</b>
Toehold	0.0013	0.0282	<b>0.0325*</b>	-0.0108	<b>0.0479*</b>	-0.0268
	(0.9477)	(0.1383)	<b>(0.0880)</b>	(0.5673)	<b>(0.0110)</b>	(0.1599)
dY_3	-0.0042	-0.0186	0.0037	-0.0107	<b>-0.0390**</b>	0.0055
	(0.7395)	(0.1408)	(0.7663)	(0.3935)	<b>(0.0018)</b>	(0.6667)
dY_2	-0.0038	-0.0165	-0.0203	0.0162	<b>-0.0427***</b>	0.0217*
	(0.7619)	(0.1919)	(0.1057)	(0.1944)	<b>(0.0006)</b>	(0.0891)
dY_1	0.0183	-0.0132	-0.0261**	-0.0071	<b>-0.0320**</b>	0.0205
	(0.1440)	(0.2954)	(0.0375)	(0.5724)	<b>(0.0103)</b>	(0.1079)
dY0	-0.0037	0.0069	0.0031	0.0182	<b>0.021*</b>	-0.0191
	(0.7663)	(0.5861)	(0.8074)	(0.1449)	<b>(0.0922)</b>	(0.1339)
dY1	0.0060	<b>0.0219*</b>	<b>0.0264**</b>	-0.0067	<b>0.0307**</b>	<b>-0.0234*</b>
	(0.6321)	<b>(0.0832)</b>	<b>(0.0354)</b>	(0.5945)	<b>(0.0141)</b>	<b>(0.0669)</b>
dY2	-0.0066	0.0076	0.0012	-0.0049	0.0182	-0.0136
	(0.5975)	(0.5458)	(0.9264)	(0.6965)	(0.1453)	(0.2885)
dY3	-0.0063	0.0101	0.0113	-0.0057	0.0409**	0.0107
	(0.6131)	(0.4221)	(0.3669)	(0.6487)	(0.0011)	(0.4013)
dConc5	-0.0093	<b>-0.0366*</b>	-0.0259	-0.0134	<b>-0.0463*</b>	0.0191
	(0.6248)	<b>(0.0541)</b>	(0.1731)	(0.4783)	<b>(0.0140)</b>	(0.3173)
dConc102	-0.0287	-0.0298	<b>-0.0384**</b>	-0.0170	<b>-0.0512**</b>	-0.0293
	(0.1324)	(0.1174)	<b>(0.0437)</b>	(0.3695)	<b>(0.0067)</b>	(0.1247)
dConc202	-0.0029	<b>-0.0471**</b>	<b>-0.0379**</b>	<b>0.0377**</b>	0.0174	<b>-0.0545*</b>
	(0.8809)	<b>(0.0132)</b>	<b>(0.0464)</b>	<b>(0.0460)</b>	(0.3567)	<b>(0.0043)</b>
dConc302	<b>0.0391**</b>	0.0125	<b>0.0430*</b>	-0.0061	0.0236	0.0082
	<b>(0.0406)</b>	(0.5116)	<b>(0.0240)</b>	(0.7452)	(0.2104)	(0.6665)
dConc402	-0.0095	0.0272	<b>0.0398**</b>	-0.0054	0.0301	-0.0094
	(0.6201)	(0.1534)	<b>(0.0364)</b>	(0.7743)	(0.1110)	(0.6217)
dConc502	0.0161	<b>0.0767****</b>	<b>0.0320*</b>	-0.0006	0.0256	<b>0.0766*</b>
	(0.3998)	<b>(0.0001)</b>	<b>(0.0929)</b>	(0.9748)	(0.1755)	<b>(0.0001)</b>
dToehold1	0.0025	<b>-0.0383**</b>	<b>-0.0453**</b>	0.0102	-0.0559***	<b>0.0315*</b>
	(0.8969)	<b>(0.0442)</b>	<b>(0.0172)</b>	(0.5886)	(0.0031)	<b>(0.0987)</b>
dToehold2	-0.0072	-0.0047	0.0101	-0.0012	0.0193	-0.0300
	(0.7060)	(0.8062)	(0.5954)	(0.9498)	(0.3057)	(0.1165)
dToehold3	-0.0142	0.0368**	0.0345*	0.0006	-0.0040	-0.0234
	(0.4584)	(0.0531)	(0.0701)	(0.9736)	(0.8306)	(0.2201)
dToehold4	-0.0026	<b>0.0450**</b>	<b>0.0657***</b>	0.0030	<b>0.0621***</b>	0.0208
	(0.8928)	<b>(0.0179)</b>	<b>(0.0006)</b>	(0.8754)	<b>(0.0010)</b>	(0.2761)
dToehold5	-0.0091	0.0177	0.0058	-0.0048	0.0117	<b>-0.0322*</b>
	(0.6330)	(0.3534)	(0.7605)	(0.7980)	(0.5356)	<b>(0.0914)</b>
dToehold6	0.0051	0.0138	0.0175	-0.0104	<b>0.0351**</b>	-0.0207
	(0.7889)	(0.4668)	(0.3585)	(0.5839)	<b>(0.0628)</b>	(0.2775)
AcqNat1	0.0163	<b>0.0222**</b>	-0.0017	0.0017	<b>0.0216**</b>	<b>0.1028***</b>
	(0.1930)	<b>(0.0787)</b>	(0.8899)	(0.8950)	<b>(0.0836)</b>	<b>(0.0000)</b>
AcqNat2	<b>-0.0864***</b>	<b>-0.0766***</b>	<b>-0.0521***</b>	<b>-0.0360***</b>	<b>-0.0986***</b>	<b>-0.0771***</b>
	<b>(0.0000)</b>	<b>(0.0000)</b>	<b>(0.0000)</b>	<b>(0.0040)</b>	<b>(0.0000)</b>	<b>(0.0000)</b>
AcqNat3	-0.0004	-0.0333*	0.0106	0.0015	0.0158	-0.0095
	(0.9745)	(0.0083)	(0.3960)	(0.9066)	(0.2047)	(0.4560)
AcqNat4	<b>0.0784***</b>	<b>0.0633***</b>	<b>0.0406***</b>	<b>0.0330**</b>	<b>0.0675***</b>	<b>0.0474***</b>
	<b>(0.0000)</b>	<b>(0.0000)</b>	<b>(0.0012)</b>	<b>(0.0084)</b>	<b>(0.0000)</b>	<b>(0.0002)</b>
AcqNat5	0.0155	0.0370**	0.0229**	0.0082	0.0478***	0.0075
	(0.2155)	(0.0034)	(0.0683)	(0.5139)	(0.0001)	(0.5591)
AcqSIC1	0.0219*	0.0399**	-0.0025	-0.0044	-0.0082	0.0226*
	(0.0800)	(0.0016)	(0.8395)	(0.7241)	(0.5102)	(0.0768)
AcqSIC2	<b>-0.0324**</b>	0.0127	-0.0063	0.0082	-0.0153	0.0025
	<b>(0.0095)</b>	(0.3128)	(0.6132)	(0.5128)	(0.2202)	(0.8432)
AcqSIC3	<b>-0.0245**</b>	-0.0195	-0.0105	-0.0073	-0.0330**	-0.0171
	<b>(0.0501)</b>	(0.1230)	(0.4033)	(0.5601)	(0.0082)	(0.1808)

AcqSIC4	0.0133	-0.0078	-0.0056	-0.0109	-0.0093	-0.0130
	(0.2859)	(0.5382)	(0.6547)	(0.3854)	(0.4571)	(0.3090)
AcqSIC5	<b>0.0313**</b>	<b>-0.0262**</b>	-0.0073	-0.0156	0.0066	<b>-0.0673*</b>
	<b>(0.0123)</b>	<b>(0.0382)</b>	(0.5626)	(0.2123)	(0.5995)	<b>(0.0000)</b>
AcqSIC6	<b>0.0254**</b>	<b>0.0271**</b>	0.0242**	0.0022	0.0110	-0.0046
	<b>(0.0418)</b>	<b>(0.0319)</b>	(0.0541)	(0.8611)	(0.3778)	(0.7190)
AcqSIC7	0.0154	-0.0092	-0.0128	-0.0098	-0.0153	0.0106
	(0.2176)	(0.4673)	(0.3067)	(0.4348)	(0.2208)	(0.4082)
AcqSIC8	-0.0134	-0.0086	0.0111	-0.0093	0.0157	<b>-0.0735***</b>
	(0.2845)	(0.4932)	(0.3745)	(0.4559)	(0.2100)	<b>(0.0000)</b>
AcqSIC9	0.0049	<b>-0.0219**</b>	0.0091	-0.0086	<b>0.0350**</b>	<b>-0.0304*</b>
	(0.6971)	<b>(0.0831)</b>	(0.4695)	(0.4929)	<b>(0.0050)</b>	<b>(0.0172)</b>
AcqSIC10	-0.0038	0.0171	0.0012	-0.0019	0.0070	<b>-0.0265*</b>
	(0.7595)	(0.1759)	(0.9265)	(0.8781)	(0.5774)	<b>(0.0379)</b>
AcqSIC11	<b>0.0453***</b>	0.0075	<b>-0.0276**</b>	-0.0148	0.0107	0.0191
	<b>(0.0003)</b>	(0.5542)	<b>(0.0276)</b>	(0.2372)	(0.3908)	(0.1350)
AcqSIC11	<b>0.0453***</b>	0.0075	<b>-0.0276**</b>	-0.0148	0.0107	<b>-0.0365*</b>
	<b>(0.0003)</b>	(0.5542)	<b>(0.0276)</b>	(0.2372)	(0.3908)	<b>(0.0043)</b>
AcqSIC13	<b>-0.0645***</b>	<b>0.0444***</b>	0.0107	<b>0.0475***</b>	0.0011	<b>0.0303*</b>
	<b>(0.0000)</b>	<b>(0.0004)</b>	(0.3917)	<b>(0.0001)</b>	(0.9302)	<b>(0.0175)</b>
AcqSIC14	<b>0.0745***</b>	-0.0168	-0.0161	-0.0135	<b>-0.0224**</b>	0.0199
	<b>(0.0000)</b>	(0.1819)	(0.1996)	(0.2801)	<b>(0.0728)</b>	(0.1199)
AcqSIC15	<b>-0.0476***</b>	<b>-0.0214**</b>	0.0151	0.0196	-0.0042	<b>0.0718***</b>
	<b>(0.0001)</b>	<b>(0.0898)</b>	(0.2290)	(0.1162)	(0.7391)	<b>(0.0000)</b>

Pair wise correlations where the symbols \*\*\*, \*\*, and \* represent statistical significance at the 1%, 5%, and 10% level, respectively.

## 6.4 Analysis of PP and PP conflicts changes associated with M&A<sup>14</sup>

This univariate analysis section endeavours to answer Hypotheses 1a and 1b, as well as Hypotheses 14a and 14b whether dividends and asset utilisation ratios of acquiring companies differ before and after M&A. Before a t-test analysis can be conducted, data in ratio or interval format must be checked in order to satisfy the assumptions of normality. In this thesis, data that are being tested for pre- and post-M&A are in ratio format and this has met the first assumption. The second

<sup>14</sup> Previous version of this paper was presented at the Multinational Finance Society in Krakow, Poland on the 26 June 2012. The authors would like to thank conference participants and an anonymous referee for many valuable comments and suggestions.

assumption has been explained in Section 5.3.3 which concludes for both parametric and non-parametric tests to be explored. Results for parametric and non-parametric tests were wholly compatible and hence it is comfortable to use parametric test for discussion.

Table 11 reports both the parametric (paired *t test*) and non-parametric (Wilcoxon test) of whether mean and median differ from year to year pre- and post-M&A. Year 0 is set as when the M&A deals are effective and completed. To avoid drawing conclusions from one set of changes, tests were done for changes in different set of years up to three years. In Panel A, pre-M&A constitutes minus 1 to minus 1 year before the M&A while post-M&A denotes plus 1 to plus 1 year after M&A. Panel B is for two years pre-and post- M&A, and panel C is for three years pre- and post-M&A.

The null hypothesis is that the true mean difference of the two variables is assumed to be zero. As for the Wilcoxon signed-rank test, the objective is to compare two populations by ranking the data instead of using the variables' means. The results for these tests reported in Table 11 support similar conclusions to those obtained with the t-test analysis.

The results in Panel A show that the mean for one-year averages of each variable (except for dividend to market capitalisation) had increased ratios but are not significant in both tests. This is not surprising since most financial aspects can only be materialised usually after one year after consummation of any large investment projects.

This can be projected in the second year of projection. As can be seen in Panel B, the changes show positive significance levels for average of mean ratios for dividend to cash flow from 5.62 to 4.65, dividend to earnings from 0.04 to 0.03. Dividend to market capitalisation ratio remains positively significant, incrementing from 0.73 to 1.16 in the second year of M&A.

Panel C presents the results for mean averages for three years. Dividend to cash flows ratio of the acquirer increases significantly from 6.595 to 8.044, dividend to earnings from 0.0049 to 0.073 and dividend to market capitalisation from 0.997 to 1.7222 (the t-and z-statistics are between 3.06 and 5.17). Leverage ratio also indicates significant increase from 9.279 to 10.871. However, even though dividend to sales ratio and asset utilisation ratio record increased proportion, they are not significant in the t-test analysis.

Post-M&A dividend increments after two years show that companies choose to pay out more dividends. These increases may occur because of increases in cash flows, earnings or the companies' market capitalisations. Further examinations for these data using one-way sample by year reveal that all the said denominators are also significantly increasing. It is noted that the Kruskal-Wallis test is a nonparametric alternative to the one-way analysis of variance *F*-test. The results are shown in Appendix 4.

These one-sample tests may indicate that companies choose to pay out more dividends to shareholders after M&A. No change in dividends one year after M&A is rational since the companies have been using their resources to subsidise

the M&A. Increased leverage is only revealed after the third year of M&A. This is consistent with findings by Ghosh & Jain (2000) who suggest that M&A companies may be taking on additional long term debt as an outcome of their activities.

Different results for ratio of dividend to sales specify a need for further attention to this variable. However, when dividend to net sales is used as a proxy in the regression models, the results confirm insignificant results (but with positive signs) with the main explanatory variables. This could be because net sales are imputed after deduction of liabilities (includes liabilities from target companies). Furthermore, unlike studies undertaken in mature markets, the asset utilisation ratio or total sales-total asset ratio (proxy for PA conflicts) does not show a significant change pre- and post-M&A in all three panels. This supports the view so far, that principal-agent conflicts may not be the agency problem in Asean 5, particularly in an M&A setting that calls for further investigation.

## **6.5 Summary**

This chapter provides an empirical investigation into the descriptive and changes of proxies for PP and PA conflicts in Asean 5 companies associated with M&A. This study employs a final sample of 807 public listed, acquiring companies that had completed at least one M&A exercise from years of 2000 to 2008. By comparing each country, Malaysia and Singapore have the most active M&A markets. The companies in these two countries also seem to perform relatively better than the other three countries; Indonesia, Thailand and the Philippines.

It is argued that these proxy variables may reflect the agency conflicts that arise from the large, controlling shareholders or PP utilising M&A as a way to expropriate the minority shareholders. So far, univariate analyses indicate that three measures of dividend payout ratios of the sample companies vary noticeably in the second year after the M&A becomes effective. Hence, Hypotheses 1a and 1b can be accepted that conclude significant changes in dividends occur before and after Asean 5 M&A which compels further advanced regression analysis to be conducted.

On the other hand, PA conflicts tested in univariate analysis, do not show any significant changes yearly or even pre- and post-M&A. This may indicate that PA conflict is less of a concern in companies with concentrated ownership structures as indicated by emerging market research. Therefore, Hypotheses 14a and 14b cannot be accepted whereby no changes occur for asset utilisation ratios before and after M&A for acquiring companies in Asean 5.

Table 11: PP conflicts and PA conflicts changes associated with M&A

Testing for: Hypotheses 1a and 1b, 14a and 14b whether dividends and asset utilisation ratios of acquiring companies differ before and after M&A.

Paired t-test							Wilcoxon signed-rank test						
Mean Values	Div/CF	Div/Ear n	Div/Sal es	Div/Mca p	Asset Util	TD/TA	Sum ranks	Div/CF	Div/Ear n	Div/Sal es	Div/Mca p	Asset Util	TD/TA
<i>Panel A: 1-year averages before and after M&amp;A</i>													
Averages for period -1	2.4557	0.016026	0.558	0.316	0.137	3.321	Negatives for period -1	581	579	583	572	925	862
Averages for period 1	2.920907	0.027718	0.666	0.641	0.136	3.552	Positives for period 1	616	614	628	624	965	916
Increase/Decrease	0.465	0.012	0.109	0.324	-0.001	0.231	Adjusted variance	9.7	9.95	1.02	1.01	1.42	1.36
Test statistics (t-stat)	not sig	not sig	not sig	(3.12)***	not sig	not sig	Test statistics (z-stat)	not sig	not sig	not sig	not sig	not sig	not sig
<i>Panel B: 2-year averages before and after M&amp;A</i>													
Averages for period -2 to 0	4.650536	0.031184	1.107	0.731	0.254	6.431	Negatives for period -2 to 0	1110	1069	1115	1087	1787	1668
Averages for period 2 to 0	5.623891	0.049587	1.41	1.161	0.266	7.199	Positives for period 2 to 0	1216	1221	1236	1232	1925	1834
Increase/Decrease	0.973	0.018	0.303	0.43	0.012	0.768	Adjusted variance	1.55	1.6	1.63	1.63	2.02	1.98
Test statistics (t-stat)	(2.62)***	(2.92)***	not sig	(2.94)** *	not sig	not sig	Test statistics (z-stat)	(2.45)**	(2.81)**	(2.65)**	(3.90)**	not sig	(3.08)**
<i>Panel C: 3-year averages before and after M&amp;A</i>													
Averages for period -3 to 0	6.595	0.049	1.544	0.997	0.362	9.279	Negatives for period -3 to 0	1603	1583	1623	1578	2573	2409
Averages for period 3 to 0	8.044	0.073	1.971	1.722	0.393	10.871	Positives for period 3 to 0	1759	1769	1779	1776	2857	2725
Increase/Decrease	1.448	0.024	0.426	0.725	0.031	1.592	Adjusted variance	1.86	1.92	1.96	1.96	2.18	2.18
Test statistics (t-stat)	(3.32)***	(3.17)***	not sig	(4.25)***	not sig	(3.74)** *	Test statistics (z-stat)	(3.20)**	(3.69)**	(3.06)**	(5.17)**	(4.13)**	(4.65)* *

Tests for statistically significant differences between the years and dependent variables are from t-tests (for means) and Wilcoxon rank-sum (i.e. Mann-Whitney-Wilcoxon) tests for each of the four measures of differences in dividends (PP proxy) and asset utilisation (PA proxy). The Wilcoxon tests are technically for the equality of the distributions rather than medians per se. The symbols \*\*\*, \*\*, and \* represent statistical significance at the 1%, 5%, and 10% level, respectively

## **CHAPTER 7: FINDINGS FOR PP CONFLICTS IN ASEAN 5**

### **M&A: MULTIVARIATE ANALYSIS**

#### **7.1 Introduction**

This chapter presents the results for the multivariate analyses of PP and PA conflicts with ownership, financial performance and M&A variables in Asean 5 acquiring companies. These evaluations are to test for Hypotheses 2a to 14c of Chapter 4 in this study. This chapter is organised as follows. Section 7.2 shows the specification test results to confirm the appropriateness of the models being used for discussion. Section 7.3 provides discussion using various regression analysis including Ordinary Least Square (OLS) and Hausman-Taylor (HT), Section 7.4 provides Tobit regression test results and discussion. Section 7.5 then discusses other robust analysis using fixed-effects vector decomposition (FEVD) analysis and finally, Section 7.6 concludes the chapter.

#### **7.2 Specification test results**

##### ***7.2.1 Multicollinearity test using VIF values***

The results for Variance Inflation Factor (VIF) values are presented in Table 12. The mean values for independent variables for each dependent proxy is 1.59 which is much lower than the threshold of 10. Furthermore, VIF values for each independent variable are also very low. This indicates that the explanatory variables included in the model are not substantially correlated with each other.

Table 12: Variance inflation factor (VIF) values for dependent and independent variables

Dependent variables	Div/Cashflow		Div/Earn		Div/Sales		Div/MktCap		Asset/Util	
	VIF	1/VIF	1/VIF	1/VIF	VIF	1/VIF	VIF	1/VIF	VIF	1/VIF
Lagearnasset	3.77	0.2649	3.76	0.2657	3.77	0.2655	3.76	0.2659	3.76	0.2658
Earnasset	3.75	0.2669	3.76	0.2661	3.75	0.2668	3.74	0.2670	3.74	0.2671
Lncashflow	1.97	0.5077	1.95	0.5132	1.96	0.5107	1.96	0.5097	1.97	0.5080
lnTotalAssets	1.69	0.5920	1.7	0.5899	1.68	0.5936	1.69	0.5914	1.68	0.5943
Year0	1.34	0.7455	1.35	0.7434	1.35	0.7417	1.34	0.7467	1.34	0.7490
LagValTrans	1.32	0.7575	1.32	0.7577	1.33	0.7533	1.32	0.7572	1.32	0.7555
Age	1.1	0.9075	1.1	0.9102	1.11	0.9049	1.1	0.9051	1.11	0.8988
RelatedInd1	1.07	0.9378	1.07	0.9378	1.07	0.9371	1.07	0.9376	1.07	0.9367
PayMethod2	1.07	0.9389	1.05	0.9537	1.05	0.9508	1.05	0.9542	1.05	0.9538
PayMethod1	1.05	0.9534	1.07	0.9355	1.07	0.9385	1.06	0.9415	1.06	0.9402
Large Share	1.05	0.9551	1.03	0.9665	1.03	0.9669	1.04	0.9597	1.04	0.9627
sales1yrgrth	1.03	0.9731	1.03	0.9733	1.03	0.9735	1.03	0.9719	1.03	0.9663
Tdta	1.03	0.9709	1.03	0.9738	1.04	0.9606	1.03	0.9702	1.04	0.9650
LagDivCFlow	1.04	0.9634								
LagDivEbitda			1.03	0.9723						
LagDivSales					1.05	0.9491				
LagDivMktCa p							1.04	0.96535		
LagAssetUtil									1.05	0.9533
<b>Mean VIF</b>	<b>1.59</b>		<b>1.59</b>		<b>1.59</b>		<b>1.59</b>		<b>1.59</b>	

Note: The mean values for independent variables for each dependent proxy is  $1.59 < 10$ : explanatory variables are not substantially correlated with each other.

### 7.2.2 Durbin-Watson-Hausman (DWH) Test

The possible endogeneity between ownership and dividend as proxies for PP conflicts is tested using a DWH test. The coefficient results are shown in Table 13 and confirm that variables (denoted by\*) and company variable proxies have significant endogeneity problems, suggesting a need to address the issue of

potential endogeneity. These variables include large shareholder, lag dividend and lag profitability.

Table 13: DWH test for endogeneity

	Div/cflow	Div/Earns	Div/Sales	Divi/Mcap	Tobin'sQ	AssetUtil
LargeShareholder	<b>2.180155**</b>	<b>0.016687**</b>	<b>0.011466*</b>	<b>0.002502**</b>	<b>-0.002952</b>	<b>0.000894</b>
LagDivCFlow	<b>5.100339*</b>					
Earnasset	<b>-0.000000*</b>		-0.000000	-0.000000	-0.000000	0.000000
LagEarnasset	0.000000		-0.000000	0.000000	0.000000*	-0.000000
LagDivEbitda		<b>-0.007553**</b>				
LagDivSales			-0.001226			
Lagdivmcap				<b>0.117222**</b>	<b>0.130201</b>	<b>1.069433**</b>

The coefficient results are shown in Table 13 and confirm that variables (denoted by\*) and company variable proxies have significant endogeneity problems

Hence, to overcome these endogeneity problems, previous studies used a two stage least square (2SLS) method (Bena & Hanousek, 2008; Reddy, 2010; Rubin & Smith, 2009). However, 2SLS requires the identification of instruments or IV that are correlated with endogenous variables and uncorrelated with the error term of the model. Table 13 also shows that most lag dividend variables have endogeneity effects on the dependent variables that will not enable for identification of instruments variable to be suitable. Furthermore, it has been discussed at length how this study also involves time-invariant variables that would hamper the possibilities of using 2SLS method. The outcome of continuing with 2SLS will result in misinterpretation of coefficients.

## 7.3 Findings from multivariate analyses

### 7.3.1 *Principal-principal conflicts and large shareholders*

In order to address these challenges of endogeneity and identification of appropriate IV, Hausman-Taylor (HT) analysis is used instead. HT takes into consideration the fixed effect estimator by allowing for the estimation effect of time-invariant variables, even though they are correlated with  $\alpha_i$ . Furthermore HT estimator maintains the benefit of both the fixed effect estimator (correlation between individual effects and regressors) and the random effect estimator (taking into account the time-invariant regressors).

The positive coefficients denote a positive relationship between explanatory variables and dependent variables, and negative coefficients denote a negative relationship between the explanatory variables with the PP/PA conflict proxies. The appropriateness of using Hausman-Taylor (HT) techniques was discussed in Section 5.3.5. Time-variant and time-invariant variables are included in the model, which compromise the suitability of using other methods such as FE or RE that will result in bias coefficients for each variable. Furthermore, all time-invariant variables such as large shareholders and M&A control variables in columns 2, 8 and 14 are omitted from the FE analysis because of its fixed-time nature.

Table 14 presents the results for the Hausman-Taylor regression analysis relating to principal-principal conflicts. Columns 1-6 in Panel A of the table show PP conflicts using ratio of dividend to cash flows, columns 7-12 in Panel B with the ratio of dividend to earnings, and columns 13 to 18 in Panel C with the ratio of

dividends to market capitalisation. A dummy variable of  $t = 0$  is set for the year M&A and is effective.

Each regression also reports the joint significance in Wald test shown in the regression summary statistics. These tests are structured so that the null hypothesis is not rejected. It can be concluded that the model performs rather poorly, alternatively if the test does reject the null, then the model is good, valid or the best (Verbeek, 2008).

All the models in Table 14 with the different regression analysis show similar results, especially in testing the main ownership variable of large shareholder. The Wald test significance of each model shows that the slopes of coefficients are jointly zero; that the models successfully describe  $y$  as the regression alternative. This means that a significant model would reject the null hypothesis and assume that independent variables are consistent and have an effect on the dependent variable. The last three columns in Panels A, B and C are using HT analysis that include large shareholder as endogenous variable.

The results generated in all three panels show that there are positively significant relationships between the PP proxies with large shareholder in each model. The results are also significant even after controlling for country and industry effects (columns 5, 6, 11, 12, 17 and 18). More dividends are allocated for payouts with higher shareholdings by the largest shareholder. These results are in accord with Hypothesis 2a that PP conflicts increased with large shareholders with M&A control variables in the model.

The results are consistent with other developed market studies that state larger shareholders do influence the dividend ratio policy (Faccio, et al., 2001b; Thomsen, 2005; Truong & Heaney, 2007). However, as explained in the literature, instead of saying the expropriation is lower with higher dividend; this thesis argues that the higher payout of dividend after M&A indicates higher expropriation. This has been proven inclusively so far, in both the univariate (Chapter 6) and these multivariate analyses.

### ***7.3.2 PP conflicts and other financial variables***

Lags of dividends (t-1) are incorporated in the model as explained in Section 5.2.2.3. This is important as the lags are usually included as the control determinants of the dividend ratio policy to be implemented in the current year. These positively significant relationships are manifested across Panels B and C for dividends to earnings and dividends to market capitalisation.

This supports studies on payout ratio of listed companies in a fast-growing market where the current dividends are affected by their pasts and their future prospects (Abdulrahman, 2007). However, insignificant relationships for past dividend to cash flows may indicate that the dividend ratio policies may be based on published earnings rather from cash flows (Andres, et al., 2009). The insignificant correlation between dividend and cash flows shown in Table 10 (correlation matrix) may affirm this speculation.

The hypothesised negative relationship between PP conflicts with leverage (Hypothesis 6) and sales growth (Hypothesis 7); however only dividend to

earnings are significant. Size of company (ln total assets) (Hypothesis 8) is negatively significant (dividend to earnings) in its relationship on PP conflicts associated with M&A.

These results support findings by Abdulrahman (2007) who states that within the limited study on emerging market age, leverage nor growth (negative but also insignificant) have no impact on the amount paid in dividend. The negative relationship with PP conflicts and leverage may also inconclusively explain why large shareholders having the incentive to expropriate wealth from debtholders by investing in risky and high expected return projects (Myers, 1977).

Positive coefficients (though insignificant) for the age of incorporation (ln Age) support Hypotheses 9 that state a positive relationship between PP conflicts. This shows that while controlling for a number of factors, older companies in Asean 5 seem to pay higher dividends. This is in line with findings by Al-Malkawi (2007) who states that older and more stable companies usually pay higher dividends as compared to the younger companies.

The significant negative finding indicates that the main reason for M&A in Asean 5 may not be that these acquiring companies are bigger. In fact, some of the South East Asian companies, family-owned companies which are predominant in East Asia, remain small even at their maturity stage and are not so keen to create large business groups (Nam, 2001).

### ***7.3.3 PP conflicts and M&A control variables***

The year of M&A as denoted at  $t=0$  shows a significant relationship, showing that there is an increase in PP conflicts in the year concerned. However, there are no significant relationships with the other M&A control variables: method of payments, relatedness of acquisition and toehold with the amount of PP conflicts.

Even though insignificant, the negative signs for related acquisition signify that PP conflicts may confirm suggestions by Bae et al. (2002) and Holmen and Knopf (2004) that expropriation is more likely when acquirer and target are from the different industries.

### ***7.3.4 PP conflicts and country and industry variables***

This section discusses the comparative results of PP conflicts between countries in Asean 5 and among the 15 industries. Appendix 5 reveals significant positive signs on the dummy variable, Malaysia, in the HT regressions (except dividend to market capitalisation). This may indicate that Malaysian companies with large shareholders pay higher dividend rates than the other four countries. The first proxy using dividend to cashflow also shows the dummy coefficients in Thailand and Singapore are positive and significant.

In contrast, the dummy variables for Indonesia and Philippines show negative but insignificant signs with PP conflicts. This is however, uncertain because these two countries only represent 2% of the overall sample in this analysis (as explained in Table 7 in Section 6.1 Table 7 which summarises the number and percentage of

effective deals in the final sample when compared with the actual effective deals and values of M&A in Asean 5 region).

In terms of PP conflicts impact by industry, some of the dummy indicators do show some significant results. Four industries, food, clothes, transportation and retail stores seem to be unanimously significant in bringing about PP conflicts. Other industry that may have an impact, based on using two out of the three proxy specifications, is the steel industry. These results support Michel's (1979) conjecture, that industry is the determinant of dividend but not company size.

In summary, the main variables used in the model appear to be significant shown in the results showing differences to the intercepts of the PP conflicts' model across these indicators. Furthermore, these variables remain significant even after controlling for other explanatory variables to control for unobservable industry and country effects. This underlines the interpretation of substantial relationships between PP conflicts using dividends and other explanatory variables.

Table 14: Panel data OLS, fixed effects, Hausman-Taylor (HT) regression results for principal-principal conflicts (large shareholders)  
 (Testing for: Hypotheses 2a, 6, 7, 8, 9, 11a, 11b, 12 and 13)

	Panel A: Ratio of dividend to cashflow						Panel B: Ratio of dividend to earnings						Panel C: Ratio of dividend to market capitalisation					
Method	OLS	FE	RE	HT	HT (ctry)	HT(ind)	OLS	FE	RE	HT	HT (ctry)	HT(ind)	OLS	FE	RE	HT	HT (ctry)	HT(ind)
Columns	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Large Shareholder	0.3084 (4.43)***		0.3079 (4.12)***	2.0432 (2.27)**	1.7549 (2.1)*	2.0922 (3.33)***	0.0037 (2.94)***		0.0040 (3.08)***	0.0585 (3.34)***	0.0596 (4.10)***	0.0598 (3.97)***	0.0003 (2.42)***		0.0003 (2.42)***	0.0060 (2.49)**	0.0051 (1.93)*	0.0062 (1.94)*
LagDivCFlow	9.3200 (4.14)***	-0.4441 (0.1500)	7.9713 (3.57)**	-0.1050 (0.0300)	-0.1072 (0.0400)	-0.0202 (0.0100)												
LagDivEbitda							0.0756 (1.6200)	-0.4599 (8.63)***	0.1001 (2.13)**	-0.4386 (9.32)***	-0.4308 (8.77)***	-0.4338 (8.94)***						
LagDivMcap													0.0905 (2.13)**	-0.3030 (5.48)***	0.0905 (2.13)**	-0.2804 (5.69)***	-0.2838 (6.15)***	-0.2911 (6.20)***
Profitability	0.0000 (0.9800)	0.0000 (0.3700)	0.0000 (1.0300)	0.0000 (1.4000)	0.0000 (1.3400)	0.0000 (0.4200)	0.0046 (0.1400)	0.0665 (0.9400)		0.0095 (0.1800)	-0.0135 (0.2600)	-0.0061 (0.1200)	0.0000 (0.3400)	0.0000 (0.2800)	0.0000 (0.3400)	0.0000 (0.7300)	0.0000 (0.5400)	0.0000 (0.4200)

LagProfitabilitiy	0.0000 (0.4900)	0.0000 (0.8700)	0.0000 (0.5600)	0.0000 (0.1800)	5.7800 (1.5600)	0.0000 (0.5800)	0.3585 (3.31)***	0.2703 (2.08)**		0.2570 (2.26)**	0.2455 (2.08)**	0.2489 (2.13)**	0.0000 (0.3600)	0.0000 (0.3600)	0.0000 (0.3600)	0.0000 (0.2200)	0.0000 (0.4000)	0.0000 (0.4700)
TDTA	-0.2374 (3.84)***	-0.0120 (0.1100)	-0.2204 (3.49)***	-0.1165 (1.3100)	-0.0464 (1.2800)	-0.0770 (0.9100)	-0.0019 (1.65)*	0.0038 -1.1700	-0.0008 (1.3900)	0.0013 (0.5700)	0.0003 (0.1500)	0.0006 (0.2800)	-0.0002 (2.31)**	0.0001 (0.6100)	-0.0002 (2.31)**	0.0001 (0.7700)	0.0001 (0.3100)	0.0001 (0.3900)
lnTotalAssets	0.1871 (0.8100)	0.0933 (0.2500)	0.1682 (0.7500)	0.1136 (0.3700)	4.5822 (1.2100)	0.1329 (0.4600)	-0.0206 (2.80)***	-0.0171 (2.01)**	-0.0006 (0.1700)	-0.0195 (2.66)***	-0.0201 (2.64)***	-0.0199 (2.64)***	0.0000 (0.0200)	-0.0002 (0.2300)	0.0000 (0.0200)	-0.0003 (0.4800)	-0.0002 (0.3800)	-0.0002 (0.2700)
Sales1YrGrth	-0.0426 (1.3500)	-0.0465 (1.0600)	-0.0422 (1.3600)	-0.0449 (1.1700)	-0.0512 (1.4600)	-0.0464 (1.2800)	-0.0009 (1.5400)	-0.0015 (2.02)**	-0.0006 (1.0400)	-0.0013 (2.16)**	-0.0013 (2.09)**	-0.0013 (2.10)**	-0.0001 (1.7000)	-0.0001 (0.9900)	-0.0001 (1.7000)	-0.0001 (1.1600)	-0.0001 (1.2500)	-0.0001 (1.2400)
Beta	0.1315 (0.0700)		-0.0260 (0.0100)	6.6197 (1.4600)	5.8034 (1.1800)	6.8900 (1.5200)	0.0481 (1.4500)		0.0425 (1.2600)	0.2257 (1.6300)	0.2774 (2.26)**	0.2509 (2.00)**	-0.0008 (0.2300)		-0.0008 (0.2300)	0.0177 (1.1600)	0.0174 (0.9600)	0.0192 (0.9100)
Ln Age	5.0338 (2.57)**	1.1860 0.0600	5.0357 (2.43)**	4.8198 (1.5300)	0.1175 (0.7400)	4.5822 (1.2100)	0.0732 (2.13)**	-0.0416 (0.1100)	0.0702 (2.00)**	0.0489 (0.4100)	0.0214 (0.2000)	0.0321 (0.2900)	0.0120 (3.22)***	-0.0072 -0.1900	0.0120 (3.22)**	0.0127 -1.0800	0.0099 -0.7600	0.0100 -0.6700
dY0	5.5357 (1.77)*	5.9176 -1.9400	5.5970 1.88*	5.4472 -1.6400	5.4647 (1.90)*	5.5622 (1.93)*	0.4089 (3.67)***	0.3821 (3.00)***	0.0950 -1.6500	0.3702 (3.32)***	0.3578 (3.08)***	0.3611 (3.14)***	0.0108 (1.82)*	0.0140 (2.35)**	0.0108 (1.82)*	0.0137 (2.56)**	0.0137 (2.75)***	0.0137 (2.70)***
lnValueTransacton	-0.4313 (0.6400)		-0.3362 (0.4700)	-0.8327 (0.7200)	-0.6561 (0.5200)	-1.1584 (0.6800)	0.0097 (0.8800)		0.0106 (0.8800)	-0.0361 (0.8000)	-0.0332 (0.8700)	-0.0364 (0.9100)	0.0019 (1.5200)		0.0019 (1.5200)	0.0006 (0.1300)	0.0009 (0.1700)	-0.0006 (0.1000)
PaymentCash	13.3434		11.9187	35.7930	30.0879	32.5396	0.0102		0.0545	0.7582	0.6204	0.6118	0.0083		0.0083	0.0812	0.0601	0.0889

	(1.2000)		(1.0100)	(1.6300)	(1.3600)	(1.3900)	(0.0500)		(0.2700)	(0.9500)	(0.9200)	(0.8800)	(0.3900)		(0.3900)	(1.0000)	(0.6800)	(0.8400)	
PaymentShares	-2.9095 (0.5100)		-2.8100 (0.4600)	5.1839 (0.5400)	5.3155 (0.5200)	5.8844 (0.5100)	0.0693 (0.7200)		0.0788 (0.8000)	0.2882 (0.7700)	0.2286 (0.7200)	0.2571 (0.7700)	0.0049 (0.4500)		0.0049 (0.4500)	0.0219 (0.5800)	0.0153 (0.3700)	0.0075 (0.1500)	
PaymentMixed	-4.4706 (0.7600)		-4.6216 (0.7400)	1.3271 (0.1400)	5.8600 (0.5300)	7.5014 (0.6100)	0.0643 (0.6500)		0.0665 (0.6600)	0.1819 (0.4800)	0.3042 (0.9000)	0.3351 (0.9400)	0.0012 (0.1100)		0.0012 (0.1100)	0.0137 (0.3600)	0.0188 (0.4200)	0.0085 (0.1600)	
RelatedInd	0.0868 (0.0200)		-0.0683 (0.0100)	5.8387 (0.7500)	3.5162 (0.4300)	4.7053 (0.5200)	-0.0086 (0.1100)		-0.0331 (0.4200)	0.2426 (0.8000)	0.2262 (0.8800)	0.2488 (0.9300)	-0.0126 (1.5200)		-0.0126 (1.5200)	0.0038 (0.1200)	-0.0006 (0.0200)	-0.0005 (0.0100)	
Toehold	0.0144 (0.2100)		0.0184 (0.2500)	-0.0570 (0.4700)	-0.0295 (0.2300)	-0.0723 (0.4900)	0.0009 (0.7500)		0.0010 (0.7900)	-0.0020 (0.4000)	-0.0005 (0.1300)	-0.0016 (0.3600)	0.0000 (0.2400)		0.0000 (0.2400)	-0.0002 (0.3900)	0.0000 (0.0900)	0.0000 (0.0700)	
Country control					Included	Included						Included	Included					Included	Included
Industry Control						Included							Included						Included
Constant	-44.770 (2.64)***	-27.399 -0.4100	-43.609 (2.46)***	- 112.511 (2.89)**	- 131.151 (2.66)***	- 152.2564 (2.91)**	-0.2534 (1.75)*	0.2314 -0.2200	-0.2982 (2.04)**	-2.2045 (2.87)***	-2.3657 (2.42)**	-2.7449 (2.46)**	0.007011 -0.22	0.114052 -0.86	0.007011 -0.22	- 0.152397 -1.4	- 0.13613 -0.93	-0.254316 -0.92	
Observations	669	669	669	669	669	669.0000	746	746	732	746	746	746	683	683	683	683	683	683	683
R-squared/RHO	0.1400	0.0200	0.2345	0.3847	0.5576	0.6326	0.0600	0.1528	0.1886	0.8900	0.8397	0.8541	0.0683	0.4604		0.8672	0.9049	0.9234	
F-Stat/Wald Chi	6.15***	0.8400	87.51***	28.47*	28.18*	33.38*	2.89***	10.21***		102.4***	95.3***	97.73***	2.87***	4.42***		49.89***	53.55***	53.93**	
Absolute value of t statistics in parentheses (* significant at 10%, ** significant at 5%; *** significant at 1%)																			

### *7.3.5 Principal-principal conflicts and large shareholder square*

The probability that the relationship between PP conflicts and large shareholders is not strictly linear but rather curvilinear is explored. Evidence such a relationship exists is argued by Gugler & Yurtoglu (2003) and Maury & Pajuste (2002) where they affirm that dividend ratio is lower at minor level of shareholding but increases as the percentage in shareholdings grows. This affirms and do not reject Hypotheses 3a and 3b.

The question of whether PP and large shareholders experience a non-linear relationship is tested in the next models. Table 15 presents regression results using HT analysis by testing PP proxy with large shareholder square as one of the explanatory variables to identify this relationship. The Wald chi-square test indicates that all specifications as a whole are statistically significant.

The estimated coefficients for large shareholders remain generally positive and statistically significant in all analysis of different dividend ratios. When the additional variable of large shareholder squared is introduced in the model, the estimated coefficients, albeit small are negative and statistically significant across models (except for dividend to cash flow for column 1 in Panel A).

This is a notable finding that may suggest a concave relationship, where, as the shareholder becomes larger, the dividend payout ratios lessen. This relationship contradicts typical studies involving dividend policies and concentrated ownership where the researchers predict a convex or U-shaped relation (Allen & Michaely, 2002; Truong & Heaney, 2007). This is another situation that explains

further how the relationships attained in mature markets are the opposite of what can be found in these Asean 5 markets.

This outcome could also possibly be caused by tax. Due to higher costs of dividends because of higher tax payments, large shareholders may deter from allowing more dividends to be paid out (La Porta, et al., 2000a). However, no empirical evidence in research can confirm the effect that tax has on corporate dividend policies because of the pronounced difference in the portfolios of high-to-low tax. For example, certain clauses allow for companies, such as Thailand, to be exempted from paying tax. However, the full amount may be excluded from taxable income if the recipient is a company listed in the Stock Exchange of Thailand or the recipient owns at least 25% of the distributing company's capital interest. (Kalay & Michaelley, 2000). Nevertheless, to investigate this relationship, further analysis will include tax-advantage of retained earnings as a control variable using calculation method by La Porta et al. (2000a).

Appendix 7 presents the results controlling for dividend tax advantage as one of the explanatory variables. The predicted insignificant coefficient results for all specifications confirm the notion that tax payments do not influence dividend policy. This is supported and interpreted by La Porta et al. (2000a) that tax payment has already been capitalised in the value of the company.

Table 15: Panel data Hausman-Taylor (HT) regression results for principal-principal conflicts with large shareholder square  
(Testing: Hypotheses 3a and 3b)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	<b>Panel A: Ratio of dividend to cashflow</b>			<b>Panel A: Ratio of dividend to earnings</b>			<b>Panel A: Ratio of dividend to market capitalisation</b>		
Large Shareholder	3.636683 (1.67)*	3.697277 (2.34)**	3.702824 (2.20)**	0.120343 (1.97)*	0.134626 (2.08)*	0.040345 (1.75)**	0.019501 (2.81)***	0.017442 (2.80)***	0.018342 (2.95)***
Large Shareholder Square	-0.028112 (1.43)	-0.029592 (2.08)**	-0.029823 (1.93)*	-0.001045 (1.84)*	-0.001142 (1.92)*	-0.001192 (2.01)**	-0.000176 (2.75)***	-0.000155 (2.74)***	-0.000163 (2.89)***
LagDivCFlow	1.819004 (0.60)	5.025639 (1.52)*	5.270719 (1.55)*						
LagDivEarn				-0.307874 (3.95)***	-0.137732 (2.75)**	-4.128836 (2.02)**			
LagDivMcap							-0.389851 (4.23)***	-0.405148 (5.40)***	-0.394815 (4.60)***
Profitability	-0.000000 (0.97)	-1.262901 (0.48)	-1.285536 (0.49)	-0.026770 (0.41)	-0.035145 (0.98)	-0.019023 (0.28)	-0.000000 (0.22)	-0.000000 (0.38)	-0.000000 (0.39)
LagProfitability	0.000000 (0.53)	7.923617 (1.01)	8.532346 (1.05)	0.258552 (1.39)	0.289559 (2.67)**	0.250491 (1.42)	0.000000 (0.20)	0.000000 (0.12)	0.000000 (0.09)
TDTA	-0.077554 (0.79)	-0.118912 (1.19)	-0.130409 (1.29)	0.000036 (0.01)	0.000157 (0.06)	0.000317 (0.11)	-0.000041 (0.36)	-0.000029 (0.31)	-0.000033 (0.31)
lnTotalAssets	<b>0.234187</b> (0.72)	<b>-0.690645</b> (1.36)	<b>-0.735150</b> (1.40)	<b>-0.020218</b> (1.68)**	<b>-0.020064</b> (1.87)	<b>-0.020035</b> (1.77)*	<b>0.000496</b> (0.76)	<b>0.000517</b> (0.97)	<b>0.000504</b> (0.83)
Sales1YrGrth	<b>-0.046263</b> (1.14)	<b>-0.026250</b> (0.65)	<b>-0.024848</b> (0.60)	<b>-0.001088</b> (1.13)**	<b>-0.001255</b> (1.42)	<b>-0.001206</b> (1.29)	<b>-0.000073</b> (0.60)	<b>-0.000078</b> (0.78)	<b>-0.000071</b> (0.63)
LnAge	<b>10.068023</b> (1.92)*	<b>10.506288</b> (2.58)**	<b>10.608973</b> (2.47)**	<b>0.229592</b> (1.80)**	<b>0.218945</b> (1.57)**	<b>0.239534</b> (1.66)**	<b>0.034707</b> (2.08)**	<b>0.031094</b> (1.99)**	<b>0.034687</b> (2.16)**
dY0	<b>5.370828</b> (1.63)	<b>11.726737</b> (1.50)	<b>12.377924</b> (1.54)**	<b>0.361724</b> (1.96)***	<b>0.357806</b> (2.18)*	<b>0.358102</b> (2.07)**	<b>0.006957</b> (0.71)	<b>0.007636</b> (0.96)	<b>0.007150</b> (0.79)
Beta	6.041867 (1.12)	4.085513 (0.99)	4.311341 (1.09)	0.210417 (1.71)*	0.251796 (1.76)*	0.232185 (1.67)*	0.016491 (0.97)	0.013698 (0.84)	0.011934 (0.75)
LnValueTransaction	<b>-1.722687</b> (1.00)	<b>-1.221588</b> (0.89)	<b>-1.371188</b> (0.97)	<b>-0.047250</b> (1.07)	<b>-0.053150</b> (1.08)	<b>-0.060142</b> (1.18)	<b>-0.007016</b> (1.11)	<b>-0.005387</b> (0.92)	<b>-0.006281</b> (1.06)
PaymentCash	33.713433 (1.24)	30.403227 (1.40)	31.715154 (1.46)	0.660868 (1.01)	0.681548 (0.91)	0.697104 (0.93)	0.096703 (1.02)	0.083720 (0.92)	0.084458 (0.94)
PaymentShares	1.426504 (0.12)	2.852244 (0.29)	2.640850 (0.27)	0.120323 (0.43)	0.104670 (0.31)	0.130988 (0.39)	-0.001898 (0.04)	-0.000113 (0.00)	0.001588 (0.04)
PaymentMixed	5.887040 (0.44)	11.491620 (1.03)	8.540938 (0.81)	0.300946 (0.99)	0.405807 (1.08)	0.448606 (1.16)	0.039668 (0.87)	0.041932 (0.92)	0.047161 (1.03)
Related Industry	-2.624365 (0.28)	-6.417905 (0.81)	-5.346184 (0.69)	-0.069517 (0.31)	-0.078409 (0.29)	-0.052572 (0.20)	-0.032251 (0.92)	-0.031513 (0.92)	-0.029220 (0.87)
Toehold	-0.006795 (0.05)	-0.029305 (0.23)	-0.013460 (0.11)	0.000331 (0.09)	0.000654 (0.15)	-0.000593 (0.13)	0.000060 (0.11)	0.000039 (0.07)	-0.000131 (0.24)
Country variable		Included	Included		Included	Included		Included	Included
Industry variable			Included			Included			Included
Constant	-142.6080 (2.18)**	-88.38581 (2.12)*	-80.04977 (1.86)*	-2.889265 (2.08)*	-3.262754 (2.07)*	-1.138122 (1.48)	-0.424181 (2.69)**	-0.337665 (2.20)**	-0.384276 (2.39)**
Observations	669	741	741	746	746	688	743	743	743
R square/Rho	0.58230	0.38344	0.332812	0.544525	.71812124	0.695423	0.68665	0.7685966	0.703215
F-stat/Wald chi	25.81*	32.5**	32.87**	24.97*	39.27***	35.02*	25.19**	37.8***	29.54*

Absolute value of t statistics in parentheses (\* significant at 10%, \*\* significant at 5%; \*\*\* significant at 1%)

Another observation that can be derived from the analysis is that the coefficients of age of incorporation become positive and statistically significant across all models. Research in M&A suggests that the more mature companies with experience are more likely to acquire (Haleblian & Finkelstein, 1999). Older companies with higher concentration of large shareholder seem to have higher dividend payout ratios and this is also especially so when concentration of large shareholders increases.

### ***7.3.6 Principal-principal conflicts and concentrated shareholders at different concentration threshold***

Further investigation is done to test Hypothesis 4, at which of the concentration threshold PP conflicts actually begin. In summary, the breakdown of concentration threshold is divided into five main groups; large shareholder at 10% or more, at 20% or more, 30% or more, 40% or more and 50% or more.

Table 16 of the regression summarises these results, again using Hausman-Taylor to control for endogeneity for principal-principal conflicts proxies. Columns 1-3 uses dividend to cashflows as a proxy for PP conflicts, Columns 4-6 uses dividend to earnings and Columns 7-9 uses dividend to market capitalisations. Regression analysis incorporating country and industry control variables are shown in Columns 2-3, 5-6 and 8-9 of each panel. The Wald chi-square of the models are significant and rhos are between 31% to 44%. Looking at the coefficient of the largest shareholder, these results confirm their positive and significant relationship with all the PP conflict proxies.

The coefficients of dummy concentration show that the no significant relationship is attained for concentration at 10% to 19.99%. Andre et al. (2007) have a similar result for large shareholder for more than 10% having no impact on the performance of M&A in their study. It is only at concentration of more than 20% that the improvement is shown. In this thesis, the same occurrence is recorded when the coefficient of the largest shareholder is at 20% or more, which may suggest increase in dividend ratio policy, also in line with Faccio et al. (2001). This just affirms that PP conflicts increase after this point.

Table 16: Hausman-Taylor regression results for principal-principal conflicts and breakdown of concentration threshold  
(Testing: H4)

	1	2	3	4	5	6	7	8	9
Dependent Variable	DividendtoCashFlow			DividendtoEarnings			DividendtoMarketCapitalisation		
<b>Largest Shareholder</b>	2.7269 (2.49)**	2.9251 (2.66)** *	2.7822 (2.50)**	0.0895 (3.02)** *	0.0956 (3.10)** *	0.0896 (3.01)** *	0.0153 (3.42)** *	0.0159 (3.37)** *	0.0155 (3.39)** *
Conc10	0.5465 -0.0500	-1.7677 -0.1600	0.7636 -0.0700	-0.1420 -0.4700	-0.1532 -0.4400	-0.1354 -0.4500	-0.0290 -0.5800	-0.0236 -0.4400	-0.0281 -0.5600
Conc20	34.7019 (2.15)**	33.6565 (2.13)**	36.3558 (2.22)**	0.8329 (2.03)**	0.8239 (1.81)*	0.8453 (2.06)**	0.1258 (1.86)*	0.1316 (1.82)*	0.1306 (1.89)*
<b>Conc30</b>	52.0372 (2.15)**	52.9764 (2.24)**	54.1523 (2.20)**	1.5462 (2.46)**	1.5549 (2.34)**	1.5569 (2.46)**	0.2671 (2.68)** *	0.2763 (2.62)** *	0.2735 (2.69)** *
<b>Conc40</b>	72.8251 (2.05)**	76.9656 (2.18)**	76.4235 (2.11)**	2.2421 (2.41)**	2.3596 (2.37)**	2.2648 (2.41)**	0.4112 (2.84)** *	0.4318 (2.79)** *	0.4214 (2.83)** *
<b>Conc50</b>	80.1199 (2.13)**	82.8863 (2.28)**	82.8439 (2.17)**	2.6809 (2.72)** *	2.6993 (2.66)** *	2.6945 (2.71)** *	0.4709 (3.10)** *	0.4797 (3.03)** *	0.4796 (3.08)** *
LagDivCFlow	4.6748 -1.4400	4.3335 -1.2800	4.7020 -1.4400						
LagDivEarn				-0.2930 (4.08)**	-0.3572 (5.47)**	-0.2896 (4.01)**			
LagDivMcap							-0.3704 (3.76)**	-0.3900 (4.14)**	-0.3701 (3.71)**
Profitability	0.0073 -0.7200	0.0081 -0.7600	0.0085 -0.8300	-0.0584 -0.9800	-0.0581 -0.9800	-0.0609 -1.0100	0.0001 (2.61)** *	0.0001 (2.71)** *	0.0001 (2.63)** *
LagProfitability	0.0680 -0.8700	0.0686 -0.8500	0.0704 -0.8900	0.2652 -1.5700	0.2480 -1.5900	0.2642 -1.5500	0.0000 -0.0500	0.0000 -0.0100	0.0000 -0.0300
TDTA	-0.0648 -1.5100	-0.0625 -1.4100	-0.0704 -1.6200	-0.0013 -0.5800	-0.0015 -0.6400	-0.0014 -0.6200	-0.0001 -0.5100	-0.0001 -0.5900	-0.0001 -0.5700
lnTotalAssets	-0.1989 -0.8600	-0.1981 -0.8300	-0.2000 -0.8600	-0.0229 (2.08)**	-0.0223 (2.22)**	-0.0229 (2.06)**	0.0004 -0.6000	0.0005 -0.6800	0.0004 -0.5900
Sales1YrGrth	-0.0010 -0.0200	-0.0023 -0.0500	-0.0004 -0.0100	-0.0008 -0.9600	-0.0010 -1.2800	-0.0009 -0.9600	-0.0001 -0.4500	-0.0001 -0.5200	-0.0001 -0.4400
<b>LnAge</b>	9.6671 (2.39)**	9.3025 (2.34)**	9.0767 (2.24)**	0.2042 (2.11)**	0.1807 -1.7200	0.2020 (2.10)**	0.0381 (2.32)**	0.0350 (2.07)**	0.0371 (2.24)**

<b>dY0</b>	5.1173 -1.4600	4.9936 -1.3800	5.1326 -1.4600	0.3702 (2.20)**	0.3564 (2.32)**	0.3692 (2.18)**	0.0085 -0.7900	0.0084 -0.8300	0.0085 -0.7800
Beta	1.0277 -0.3000	1.3727 -0.3800	1.8312 -0.5200	0.1343 -1.6000	0.1736 (1.78)*	0.1408 -1.6400	0.0104 -0.7400	0.0141 -0.9300	0.0121 -0.8300
LnValueTransactio n	-0.9122 -0.7800	-0.9240 -0.7700	-0.8649 -0.7400	-0.0340 -1.0800	-0.0385 -1.1000	-0.0333 -1.0600	-0.0054 -1.1200	-0.0059 -1.1500	-0.0054 -1.1000
PaymentCash	38.1592 -1.8200	39.2091 (1.85)*	39.2963 -1.8600	0.8554 -1.5400	0.8360 -1.3800	0.8567 -1.5400	0.1622 (1.87)*	0.1642 (1.8)*	0.1652 -1.8700
PaymentShares	8.5629 -0.8900	9.7072 -0.9800	8.4042 -0.8700	0.2858 -1.1900	0.2690 -1.0000	0.2797 -1.1700	0.0543 -1.3800	0.0571 -1.3700	0.0543 -1.3700
PaymentMixed	6.1775 -0.6300	9.7625 -0.9300	6.0481 -0.6100	0.2428 -0.9900	0.3184 -1.1000	0.2388 -0.9700	0.0531 -1.3100	0.0656 -1.4600	0.0531 -1.2900
RelatedInd	-5.7989 -0.8200	-6.2840 -0.8600	-6.6776 -0.9300	-0.0292 -0.1600	-0.0206 -0.1000	-0.0371 -0.2000	-0.0153 -0.5200	-0.0163 -0.5200	-0.0171 -0.5700
Toehold	-0.0831 -0.6800	-0.0940 -0.7500	-0.0531 -0.4300	-0.0014 -0.4600	-0.0008 -0.2400	-0.0012 -0.3700	-0.0004 -0.7500	-0.0003 -0.6400	-0.0003 -0.6200
Country control		Yes			Yes			Yes	
Industry Control			Yes			Yes			Yes
Constant	- 294.220 4	- 335.1769	- 296.253 6	-9.2888	-9.6421	-9.2814	-1.6359	-1.6808	-1.6516
	(2.20)**	(2.42)**	(2.19)**	(2.69)** *	(2.51)**	(2.69)** *	(3.00)** *	(2.87)** *	(2.98)** *
Observations	688	688	688	746	746	746	702	702	702
RHO	0.3336	0.3301	0.3326	0.4740	0.6268	0.4664	0.5445	0.6095	0.5352
Wald Chi	32.9**	34.09*	33.69*	31.74*	44.53***	31.16*	31.07*	33.54*	32.34*
Absolute value of z statistics in parentheses (* significant at 10%, ** significant at 5%; *** significant at 1%)									

### 7.3.7 *Principal-principal conflicts and second large shareholder*

Some studies in the developed market claim that the presence of the second largest shareholder may act to curb expropriation from the controlling shareholder (Barclay & Holderness, 1989). The role of second large shareholder in Asean 5 is then tested in the following models shown in Table 17 to determine the relationship with the largest shareholder for Hypothesis 5.

The results for large shareholder remain positive and significant upon addition of the variable, second large shareholder, in the HT analysis. However, its positive but insignificant coefficients indicate that there is no relationship between both variables and support the null hypothesis. This is aligned with the notion that second largest shareholders have no impact on dividend ratio policy in East Asian companies (Claessens et al. 2000a) and that holds true during M&A. The second shareholder role is regarded as insignificant in the emerging economy, contradictory to Anglo-Saxon studies where the second largest shareholder usually curbs agency conflicts.

The variable, dY0 that denotes the year of effective M&A stays significant in these analyses. The coefficients of sales growth and total assets, indicating company's growth and size, are negative and significant only for the dependent variable using dividends to earnings. The expropriation may be exacerbated through higher dividend payouts but to the detriment of lowering the company's prospects to grow. Nonetheless, this negative relationship remains unconfirmed because of the insignificant results with the other PP proxies.

Table 17: Hausman-Taylor results for principal-principal conflicts and second large shareholder (Testing Hypothesis 5)

Model	1	2	3	4	5	6	7	8	9
<b>Dependent Variable</b>	<b>DividendtoCashFlow</b>			<b>DividendtoEarnings</b>			<b>DividendtoMarketCapitalisation</b>		
<b>Large Shareholder</b>	<b>2.1214</b> (3.48)* **	<b>1.9167</b> (3.67)***	<b>1.9475</b> (3.69)***	<b>0.0604</b> (3.63)* **	<b>0.0606</b> (4.26)***	<b>0.0645</b> (4.40)***	<b>0.0050</b> (2.05)* *	<b>0.0040</b> (1.79)*	<b>0.0051</b> (1.97)**
<b>Large Second Shareholder</b>	<b>0.6461</b> (1.50)	<b>0.6033</b> (1.54)	<b>0.6135</b> (1.54)	<b>0.0204</b> (1.54)	<b>0.017129</b> (1.48)	<b>0.0176</b> (1.50)	<b>0.0019</b> (1.33)	<b>0.0017</b> (1.25)	<b>0.0017</b> (1.16)
LagDivCFI ow	-1.798 (0.72)	-1.4699 (0.60)	-1.5937 (0.65)						
LagDivEar n				-0.440 (8.75)* **	-0.4316 (8.25)**	-0.4369 (8.12)***			
LagDivMca p							-0.281 (5.81)* **	-0.277 (5.85)* **	-0.2828 (5.77)** *
Profitability	-0.000 (1.65)	-0.0000 (1.54)	-0.0000 (1.53)	-0.012 (0.00)	-0.0248 (0.47)	-0.0266 (0.48)	-0.000 (0.68)	-0.000 (0.70)	-0.0000 (0.59)
LagProfitab ility	0.0000 (1.83)*	0.0000 (1.91)*	0.0000 (1.92)*	0.2737 (2.11)*	0.2555 (1.89)*	0.2534 (1.83)*	0.0000 (0.89)	0.000 (0.89)	0.000 (0.87)
TDTA	-0.032 (0.41)	-0.0450 (0.57)	-0.0396 (0.50)	0.0010 (0.43)	-0.0000 (0.02)	-0.0001 (0.04)	0.0000 (0.39)	0.0000 (0.30)	0.0000 (0.32)
lnTotalAsse ts	0.1270 (0.44)	0.14827 (0.52)	0.1464 (0.51)	-0.022 (2.68)* **	-0.0223 (2.62)***	-0.0222 (2.54)**	-0.000 (0.36)	-0.000 (0.31)	-0.0001 (0.18)

Sales1YrGr th	-0.056 (1.55)	-0.0565 (1.58)	-0.0560 (1.56)	-0.001 (2.00)* *	-0.0014 (1.95)*	-0.0014 (1.97)*	-0.000 (1.28)	-0.000 (1.32)	-0.0001 (1.36)
LnAge	6.5070 (1.58)	6.3901 (1.66)*	6.6364 (1.70)*	0.0638 (0.52)	0.0387 (0.35)	0.0699 (0.62)	0.0152 (1.12)	0.0151 (1.15)	0.0155 (1.10)
dY0	5.0160 (1.86)*	4.9342 (1.83)*	4.9562 (1.84)*	0.3846 (3.05)* **	0.3662 (2.80)***	0.3654 (2.72)**	0.0134 (2.48)* *	0.0134 (2.53)* *	0.0133 (2.43)** *
Beta	4.8581 (1.16)	5.0966 (1.27)	4.6273 (1.16)	0.1699 (1.35)	0.2243 (1.96)*	0.2155 (1.85)*	0.0087 (0.59)	0.0081 (0.55)	0.0074 (0.47)
LnValueTra nsaction	-1.631 (1.07)	-1.4664 (1.05)	-1.5612 (1.09)	-0.046 (1.06)	-0.0452 (1.17)	-0.0609 (1.50)	-0.000 (0.07)	0.0006 (0.12)	-0.0014 (0.27)
PaymentCa sh	32.276 (1.32)	28.2573 (1.28)	28.1738 (1.26)	0.6401 (0.87)	0.5270 (0.82)	0.6088 (0.91)	0.0579 (0.68)	0.0423 (0.53)	0.0598 (0.69)
PaymentSh ares	2.9191 (0.24)	2.4111 (0.22)	3.1265 (0.28)	0.1530 (0.42)	0.0985 (0.31)	-0.0527 (0.16)	0.0087 (0.21)	0.0080 (0.20)	-0.0045 (0.11)
PaymentMi xed	0.0371 (0.00)	4.5933 (0.39)	5.5339 (0.45)	0.1143 (0.30)	0.2101 (0.62)	0.0043 (0.01)	0.0093 (0.22)	0.0162 (0.38)	0.0014 (0.03)
RelatedInd	4.9492 (0.49)	4.4007 (0.47)	4.5953 (0.48)	0.2888 (0.94)	0.3148 (1.16)	0.3687 (1.32)	0.0018 (0.05)	-0.001 (0.02)	0.0016 (0.05)
Toehold	0.0382 (0.26)	0.0283 (0.20)	0.0053 (0.04)	0.0018 (0.39)	0.0029 (0.72)	0.0059 (1.35)	0.0000 (0.17)	0.0001 (0.22)	0.0002 (0.41)
Country control		Included	Included		Included	Included		Included	Included
Industry Control			Included			Included			Included
Constant	-118.2 (2.84)* **	-133.59 (2.91)***	-139.00 (2.91)***	-2.334 (3.12)* **	-2.356 (2.80)***	-5.926 (2.47)**	-0.129 (1.09)	-0.124 (0.81)	-0.34334 (1.02)
Obs	612	612	612	681	681	681	626	626	626

RHO	0.7112	0.66518	0.67714	0.8573	0.80488	0.79552	0.8888	0.8827	0.88521
Wald Chi	26.44*	32.98**	33.32**	92.64*	87.33***	87.38***	50.09*	50.97*	49.96**
	*			**			**	**	
Absolute value of z statistics in parentheses (* significant at 10%, ** significant at 5%; *** significant at 1%)									

### 7.3.8 *Principal-principal conflicts using performance measurement (Tobin's q)*

As a robust analysis and to test Hypothesis 2b, performance measurement utilising Tobin's q as proxy for PP conflicts has also being analysed in an HT regression method. Table 18 reports the HT result that also consists of regression analysis with large shareholder square (Model 4-6).

Models 1-3 in Table 18 show HT regression with Tobin's q as the dependent variable with the large shareholder and other control variables. It is observed that the coefficients of large shareholders are negative, but then they are insignificant. Only the year control dY0 shows significant coefficient across all models. This may show that there as large shareholders increase, company performance tends to deteriorate. However, this remains inconclusive due to the insignificant p-values. It is also noted that the relationships between Tobin's q, cash flow and company growth are found to be negative but insignificant coefficients.

Upon checking that the model may not be linear, the large shareholder square variable is incorporated into the analysis. Models 4-6 in Table 18 show that the

relationship between Tobin's q and large shareholder becomes positive, but the large shareholder square variable is negatively related. The coefficients of the variables however, remain insignificant.

Table 18: Hausman-Taylor results for principal-principal conflicts using Tobin's q (performance measurement) (Testing: Hypothesis 2b)

	(1)	(2)	(3)	(4)	(5)	(6)
	Tobin'sq	Tobin'sq	Tobin'sq	Tobin'sq	Tobin'sq	Tobin'sq
Lship	-0.027707	-0.048222	-0.040557	0.037277	0.043921	0.030356
	(0.63)	(0.68)	(0.65)	(0.32)	(0.36)	(0.29)
Lshipsquare				-0.000278	-0.000372	-0.000249
				(0.26)	(0.33)	(0.27)
TDTA	-0.000140	0.000122	0.000094	0.000344	0.000381	0.000398
	(0.13)	(0.10)	(0.08)	(0.28)	(0.31)	(0.34)
lnTotalAssets	0.001112	0.001120	0.001123	0.001211	0.001207	0.001213
	(0.40)	(0.41)	(0.42)	(0.47)	(0.47)	(0.47)
CashtoTA	-0.000791	-0.000808	-0.000761	-0.000416	-0.000393	-0.000362
	(0.79)	(0.75)	(0.73)	(0.47)	(0.45)	(0.43)
Sales1YrGrth	-0.000428	-0.000441	-0.000442	-0.000518	-0.000516	-0.000511
	(0.80)	(0.81)	(0.83)	(1.02)	(1.01)	(1.00)
LnAge	-0.017414	0.049166	0.038532	0.078047	0.105767	0.087180
	(0.16)	(0.38)	(0.31)	(0.39)	(0.52)	(0.46)
dY0	-0.089397	-0.087664	-0.087626	-0.087441	-0.087099	-0.087280
	(2.17)*	(2.14)*	(2.17)*	(2.29)*	(2.26)*	(2.27)*
Beta	-0.046153	-0.181605	-0.134644	0.125402	0.104788	0.078222
	(0.23)	(0.53)	(0.47)	(0.51)	(0.41)	(0.37)
LnValueTransaction	0.070327	0.086045	0.081584	0.024888	0.025773	0.030585
	(1.31)	(1.16)	(1.17)	(0.33)	(0.34)	(0.44)
PaymentCash	-0.430581	-0.580869	-0.456511	0.350751	0.419635	0.327232
	(0.42)	(0.44)	(0.38)	(0.27)	(0.32)	(0.28)
PaymentShares	0.168866	0.138078	0.157031	0.333805	0.351949	0.353310
	(0.41)	(0.27)	(0.32)	(0.61)	(0.67)	(0.72)
PaymentMixed	0.104961	-0.161364	-0.121782	0.332904	0.329725	0.292302
	(0.26)	(0.24)	(0.19)	(0.53)	(0.48)	(0.46)
RelatedInd	0.081688	-0.002332	0.024727	0.245425	0.216378	0.231714
	(0.24)	(0.01)	(0.06)	(0.60)	(0.54)	(0.64)
Toehold	0.001346	0.000400	0.000683	-0.000844	-0.001505	-0.001728
	(0.28)	(0.07)	(0.12)	(0.13)	(0.23)	(0.28)
Country		Included	Included		Included	Included
Industry			Include			Included
Constant	1.742883	2.693747	2.425652	-0.481802	-0.972671	-0.658661
	(0.94)	(0.75)	(0.73)	(0.18)	(0.25)	(0.19)
Observations	713	713	713	713	713	713
Number of IDCODE	272	272	272	272	272	272

Absolute value of z statistics in parentheses (\* significant at 10% \*\* significant at 5%; \*\*\* significant at 1%)

#### **7.4 Robust study: Panel Tobit regression of PP conflicts and explanatory variables: Decision whether or not to pay dividends**

The preceding HT regression results show large shareholders are positively related to dividend ratios which may indicate PP conflicts are exacerbated during M&A. However, there are companies in the sample that do not pay out dividends. Tobit regression analysis can be used to test whether or not large shareholders also play a part in the decision to pay or not to pay dividends in Asean 5 acquiring companies.

The Tobit model is a censored model and is appropriate because the dividend distribution is censored from below zero. In fact, there are 2,867 out of 6,400 observations (out of 807 companies for seven years of data) in this sample that have zero dividends. OLS or other regression estimates of coefficients might be inconsistent and biased towards zero. Control for endogeneity on the large shareholder variable must also be taken into account in the following Tobit regression.

Table 19 reports the Tobit regression results regarding the three alternative definitions of PP conflicts in M&A. Wald-chi square test indicates that all specifications of each model are statistically significant as a whole. Country and industry dummies (not reported but are jointly significant) are included for columns 3-4 (dividend to cash flow), 7-8 (dividend to earnings) and 11-12 (dividend to market capitalisation). As usual, year dummy  $t = 0$  representing the effective year of M&A is included.

#### ***7.4.1 PP conflicts and large shareholder***

It is indicated from the coefficient results on large shareholders that they are positive and significant across all models. This again supports the notion that large shareholders of acquiring companies in Asean 5 play a main role in deciding to pay out dividends, reconfirming Hypothesis 2a. While Fama and French (2001) suggest that the companies are likely to pay out dividends with lower levels of investment, this result proves otherwise.

#### ***7.4.2 PP conflicts and other financial controls***

The coefficients of leverage (TDTA) exert the expected negative and statistically significant sign across all definitions and specifications of dividend ratios and support the conclusions of Mancinelli and Ozkan ((2006). This may also mean that the negative relationship suggests the reduction in debt associated with the decision to pay out dividend is evident even during M&A.

The level of company risk as measured by beta is shown to have positive and statistically significant coefficients across all models. This indicates that riskier acquiring companies prefer to pay out dividends.

Size (ln Total Assets), age of company and growth (sales growth) all document negative but insignificant relationships with PP conflicts. These results are in line with Gugler and Yurtoglu (2003) who find negative but insignificant relationships for company dividend behaviour with size, leverage and investment opportunities. Although these are inconclusive, the results possibly suggest that smaller, younger and slower growing acquiring companies are more likely to pay out dividends.

#### **7.4.3 *PP conflicts and M&A controls***

Columns 2-4, 6-8 and 10-12 for each specification of ratios are analysed by incorporating the M&A variables into the Tobit regression analysis. As can be seen from the results, all coefficients for M&A payments using cash are positive and significantly related to PP conflicts. Other variables remain insignificant.

#### **7.4.4 *PP conflicts and country variables***

One of the main limitations of this thesis is the lack of reliable data available for many developing countries, in this case, Indonesia and Philippines (2% and 6.5% respectively) out of the overall sample explained in Table 7 in Section 6.1). Conducting Tobit analysis in Stata software has indicated that these dummy regressors are collinear with other independent regressors and these two countries are dropped from the model to avoid numerical instability (Cameron & Trivedi, 2009).

A simple OLS regression can be employed to check which other regressor(s) that is/are in perfect collinearity with the two countries as dependent variable; AcqNat1 (Indonesia) and AcqNat5 (Thailand). The estimation results presented in Appendix 6 indicate that they are significantly related and dependable with all the other three countries denoted by AcqNat2 (Malaysia), AcqNat3 (Philippines) and AcqNat4 (Singapore). Hence, it is sufficient to use these three countries as control variables (Hardin, 1996).

The acquirer nation that has a positive and statistically significant relationship with PP conflicts, as shown in Table 19, is Malaysia. This may imply that more

acquiring companies in Malaysia pay out dividends as opposed to the other countries in Asean 5. Further tests need to be carried out to ensure that the inclusion of dummy variable Malaysia will not bias the coefficient of large shareholder and the overall regression estimation conducted earlier.

Table 20 confirms that this is not the case. The table reports Tobit regression results that exclude the variable of acquirer nation, Malaysia. The Wald-tests are also statistically significant. As can be seen, coefficient of large shareholder remains positive and significant in all the models. Similarly, the signs for leverage (TDTA) and risks (beta) are still showing significant results.

#### ***7.4.5 PP conflicts (large shareholder square) and non-linear relationship***

A non-linear relationship is hypothesised between large shareholder and dividend payout which has been confirmed in the previous analysis for continuous data. Further analysis is made to ascertain whether this is true for discrete data (non-paying or paying dividend companies). Negative and significant coefficients in some models (columns 2-3, 7-8 and 10-12) are attained but there is no conclusive support for a non-linear relationship, as shown in Appendix 8.

Essentially this may mean that the relationship between large shareholders increases the likelihood of payout decisions at lower levels of large shareholders but lessens at higher levels of shareholdings. The probability of non-linear hypothesis supports the study of dividend payout decisions for companies in 37 countries by Truong (2007). However, his findings show the opposite magnitude or signs, where the largest shareholder is negatively related, and the likelihood of

paying a dividend becomes positive with large shareholder square. His conclusion is consistent with the view that largest shareholder act as a monitor by reducing the PA agency conflicts at lower level but that role shifts to entrenchment behaviour as the percentage of largest shareholding increases. This study argues that initially the largest shareholders in Asean 5 companies are already so high and therefore disputes the monitoring role.

Table 19: Robust analysis: Tobit regression results for principal-principal conflicts and large shareholders

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Dividend to cashflow				Dividend to Earnings				Dividend to Market Capitalisation			
<b>Large shareholder</b>	<b>0.1106</b>	<b>0.0687</b>	<b>0.0862</b>	<b>0.0895</b>	<b>0.0748</b>	<b>0.0571</b>	<b>0.0609</b>	<b>0.0538</b>	<b>0.0871</b>	<b>0.0610</b>	<b>0.0618</b>	<b>0.0616</b>
	<b>(3.66)***</b>	<b>(3.97)***</b>	<b>(3.44)***</b>	<b>(3.29)***</b>	<b>(3.54)***</b>	<b>(2.98)***</b>	<b>(2.97)***</b>	<b>(3.21)***</b>	<b>(2.54)**</b>	<b>(2.40)**</b>	<b>(2.51)**</b>	<b>(2.54)**</b>
LagDivCashflow	2.5194	-0.1459	3.6673	-0.2565								
	(2.30)*	(2.63)**	(3.05)**	(3.15)**								
LagDividendEarnings					0.1497	-0.0799	3.2679	3.4265				
					(2.44)**	(2.06)**	(2.55)*	(1.07)				
LagDivMktCapitalisation									24.4482	-0.5410	-0.4239	-0.4801
									(2.07)*	(0.49)	(2.00)*	(0.46)
TDTA	-0.0492	-0.00545	-0.0059	-0.0056	-0.0032	-0.0076	-0.0079	-0.00807	-0.0016	-0.0061	-0.0063	-0.0060
	(1.84)*	(1.95)*	(1.84)*	(1.69)*	(2.17)**	(3.03)***	(3.17)***	(3.48)***	(2.49)*	(2.25)*	(2.47)*	(2.27)**
<b>lnTA</b>	<b>-0.0000</b>	<b>-0.0000</b>	<b>0.0000</b>	<b>-0.0000</b>	<b>-0.0000</b>	<b>0.0000</b>	<b>-0.0000</b>	<b>-0.0000</b>	<b>0.0000</b>	<b>-0.0000</b>	<b>0.0000</b>	<b>0.0000</b>
	<b>(0.83)</b>	<b>(0.32)</b>	<b>(0.06)</b>	<b>(0.34)</b>	<b>(1.02)</b>	<b>(0.76)</b>	<b>(0.26)</b>	<b>(0.07)</b>	<b>(0.96)</b>	<b>(0.91)</b>	<b>(0.03)</b>	<b>(0.81)</b>
<b>Beta</b>	<b>1.7435</b>	<b>0.2192</b>	<b>0.3671</b>	<b>0.3611</b>	<b>0.129351</b>	<b>0.1798</b>	<b>4.7004</b>	<b>0.2019</b>	<b>1.7772</b>	<b>3.6971</b>	<b>4.4475</b>	<b>0.2266</b>
	<b>(2.63)**</b>	<b>(2.21)**</b>	<b>(2.49)**</b>	<b>(2.40)**</b>	<b>(1.86)**</b>	<b>(1.85)*</b>	<b>(2.15)**</b>	<b>(2.14)**</b>	<b>(2.57)*</b>	<b>(3.46)**</b>	<b>(1.77)*</b>	<b>(3.89)**</b>
Sales1YrGrth	-0.0000	0.0038	0.0054	0.0041	0.0001	-0.0001	0.0088	0.0069	0.0001	-0.0035	-0.0029	-0.0046
	(0.97)	(0.45)	(0.23)	(0.25)	(0.92)	(0.08)	(0.53)	(0.42)	(1.15)	(0.17)	(0.75)	(0.24)
lnAge	-0.1699	-0.0229	0.8144	-0.0883	1.1304	-0.0175	-0.0787	0.7738	-0.1310	-0.0583	-0.1338	1.1052
	(1.71)*	(0.23)	(0.79)	(0.88)	(1.48)	(0.03)	(1.07)	(1.05)	(1.51)	(0.78)	(1.63)	(1.00)
<b>dY0</b>	<b>0.0136</b>	<b>0.0603</b>	<b>0.0325</b>	<b>0.0283</b>	<b>0.0696</b>	<b>1.2017</b>	<b>1.3418</b>	<b>1.0461</b>	<b>0.0004</b>	<b>0.0396</b>	<b>1.2660</b>	<b>0.9837</b>
	<b>(0.10)</b>	<b>(0.53)</b>	<b>(0.23)</b>	<b>(0.19)</b>	<b>(0.95)</b>	<b>(0.76)</b>	<b>(0.37)</b>	<b>(0.17)</b>	<b>(1.07)</b>	<b>(0.79)</b>	<b>(0.39)</b>	<b>(0.64)</b>
<b>LnValueTransaction</b>		<b>0.4443</b>	<b>0.5412</b>	<b>-0.0447</b>		<b>0.4230</b>	<b>-0.0378</b>	<b>0.7057</b>		<b>-0.0165</b>	<b>0.5126</b>	<b>-0.0320</b>
		<b>(1.25)</b>	<b>(1.20)</b>	<b>(1.68)</b>		<b>(1.17)</b>	<b>(1.46)</b>	<b>(1.72)</b>		<b>(0.62)</b>	<b>(1.45)</b>	<b>(1.10)</b>
<b>PaymentCash</b>		<b>1.4409</b>	<b>1.4946</b>	<b>1.5065</b>		<b>1.3534</b>	<b>1.2736</b>	<b>1.2372</b>		<b>1.2241</b>	<b>1.1477</b>	<b>1.2012</b>
		<b>(2.82)***</b>	<b>(2.48)**</b>	<b>(2.42)***</b>		<b>(2.15)***</b>	<b>(2.79)***</b>	<b>(3.02)***</b>		<b>(2.40)**</b>	<b>(2.41)**</b>	<b>(2.11)*</b>
PaymentShare		-1.8913	-0.8989	-1.2957		0.3495	0.2890	0.1519		0.2510	-0.0087	0.1220
		(0.61)	(1.18)	(0.43)		(0.65)	(1.41)	(0.81)		(1.16)	(1.11)	(0.52)
PaymentMixed		-0.4001	0.4285	-2.5212		0.2180	-2.2114	0.1230		0.3424	0.3260	0.6544
		(0.13)	(0.67)	(0.81)		(1.06)	(0.71)	(0.29)		(0.77)	(1.48)	(0.20)
Related Target		-3.5775	-3.2027	0.2760		-3.9393	-3.6120	0.1783		-3.7322	-3.3300	-2.5184
		(1.56)	(1.17)	(1.52)		(1.70)	(1.63)	(1.27)		(1.25)	(1.19)	(1.10)
Toehold		0.0355	-0.0011	0.0327		0.0430	0.0003	0.0017		-0.0014	0.0230	0.0142
		(0.96)	(0.58)	(0.91)		(1.16)	(0.12)	(0.76)		(1.03)	(0.63)	(0.38)

o. acquirornation==Indonesia				0.0000				0.0000				0.0000
			(.)	(.)			(.)	(.)			(.)	(.)
acquirornation==Malaysia			0.8106	0.8038			0.7991	0.7809			-6.3736	0.58247
			(1.96)*	(1.88)*			(2.42)*	(2.64)**			(1.87)*	(1.83)*
acquirornation==Philippines			0.5356	0.4111			-7.2495	-10.1763			0.4168	-6.3858
			(0.92)	(0.69)			(1.19)	(2.09)*			(0.92)	(0.94)
acquirornation==Singapore			-0.2619	4.7665			0.0235	0.0809			-0.1575	6.6376
			(0.70)	(1.21)			(0.85)	(1.00)			(1.31)	(0.51)
o. acquirornation==Thailand			0.0000	0.0000			0.0000	0.0000			0.0000	0.0000
			(.)	(.)			(.)	(.)				
Industry				Included				Included				Included
Constant	-0.6526	-0.6561	-3.3785	-0.6588	-0.0738	-0.0562	2.8796	-4.0034	13.9172	-0.0598	2.8959	-0.7113
	(24.50)**	(3.47)**	(18.69)**	(3.15)**	(4.01)**	(108.69)**	(18.06)**	(4.45)**	(2.49)*	(2.65)**	(2.67)**	(2.76)**
Observations	1204	685	685	685	1201	688	688	688	1150	658	658	658
Log pseudo-likelihood	-6198.77	-3529.51	-3497.69	-3495.50	-6257.40	-3564.94	-3528.21	-3494.144	-5950.96	-3402.47	-3371.85	-3335.65
Left censored observations (zero values)	355	200	200	200	359	202	202	202	313	171	171	171
Wald chi <sup>2</sup>	32.15***	41.21***	30.83**	29.07**	48.94***	69.08***	69.43***	93.54***	35.57***	36.00**	38.2**	47.68**
Absolute value of z statistics in parentheses (* significant at 10%, ** significant at 5%, *** significant at 1%)												

Table 20: Tobit regression of PP conflicts (without Malaysia)

Model	(1)	(2)	(3)
	DividendCashflow	DividendEarnings	DividendMktCap
<b>Large shareholder</b>	<b>0.0862</b> <b>(3.44)***</b>	<b>0.0609</b> <b>(2.97)***</b>	<b>0.0618</b> <b>(2.52)**</b>
LagDivCashflow	-0.2366 (1.52)		
LagDividendEarnings		-0.1209 (1.05)	
LagDivMktCapitalisation			-0.4239 (0.41)
<b>TDTA</b>	<b>-0.0059</b> <b>(1.84)*</b>	<b>-0.0079</b> <b>(3.17)***</b>	<b>-0.0063</b> <b>(2.47)*</b>
lnTA	-0.0000 (0.35)	-0.0000 (0.39)	0.0000 (0.63)
Beta	0.3671 (2.49)**	0.2494 (4.83)**	-4.4476 (4.33)**
Sales1YrGrth	0.0003 (0.23)	0.0088 (0.53)	0.0010 (0.15)
lnAge	-0.0957 (0.98)	-0.0787 (1.07)	1.2715 (1.63)
dY0	0.0325 (0.23)	1.3418 (0.37)	1.2660 (0.39)
LnValueTransaction	-0.0406 (1.20)	-0.0378 (1.57)	-0.0260 (1.45)
<b>PaymentCash</b>	<b>1.4947</b> <b>(2.48)**</b>	<b>1.2737</b> <b>(1.91)***</b>	<b>1.1477</b> <b>(2.41)**</b>
PaymentShare	0.3255 (1.18)	-0.8928 (1.41)	0.2330 (0.00)

PaymentMixed	0.4284 (1.47)	0.3273 (0.71)	-1.7615 (1.48)
Related Target	0.2555 (1.17)	-3.6120 (1.63)	0.2094 (1.47)
Toehold	-0.0011 (0.32)	0.0003 (0.60)	0.0230 (0.17)
Philippines	4.0006 (0.77)	-0.0791 (0.23)	1.6598 (0.51)
Singapore	11.7489 (7.99)***	12.4642 (8.48)**	11.7060 (7.66)**
Thailand	-0.8106 (1.96)*	-0.7991 (2.35)*	-0.6087 (1.54)
Constant	-2.5679 (3.12)**	-2.7927 (4.3)**	-1.8508 (2.73)**
Observations	685	688	658
<b>Log pseudo-likelihood</b>	-3497.69	-3528.21	-3371.85
<b>Left censored observations (zero values)</b>	200	202	171
Wald chi <sup>2</sup>	30.83**	69.42***	38.20**
Absolute value of z statistics in parentheses (* significant at 10%, ** significant at 5%; *** significant at 1%)			

## **7.5 Robust analysis: Fixed-effects vector decomposition**

### **(FEVD) of PP conflicts and explanatory variables**

The apparent limitations of fixed effect (FE) models to estimate time-invariant variables have been thoroughly discussed in Section 5.3.4. Hausman-Taylor (HT) is then used in the analysis to allow for time-invariant variables (large shareholder and M&A variables) to be incorporated in the models which have been thoroughly examined and duly discussed earlier.

Fixed-effects vector decomposition (FEVD) is another method recently proposed by Plümper and Troeger (2007) as already defined in Section 5.3.7. The authors reiterate that the model performs far better than pooled OLS, RE, and the Hausman-Taylor procedure if both time-invariant and time-varying variables are correlated with the unit effects. As an alternative measurement for incorporating time-variant and time-invariant data analysis, FEVD method is employed here to support the proxies for PP conflicts in this study.

Table 21 presents the estimated coefficients of the dependent variable using dividend to cash flow and other variables obtained from FEVD (full results are provided in Appendix 9 to 13 for other dependent variables). As the table exhibits, in all FEVD models, the large shareholders explanatory variable appears as significant with a positive sign. The positive sign implies that dividend increases as the level of percentage in large shareholders grows. For instance, the first specification (Model 1) in Table 21 reveals that when other variables are constant,

a 1% increase in large shareholder will increase the current dividend by an average ratio of dividend to cash flow by 36.

The explanatory variable for second large shareholder is included in Models 4 to 6 of Table 21. The coefficients are found to be positive, similar to using HT analysis. However, this is significant when using FEVD. There is an increase of dividend ratio of 0.34 with an increase of 1% in the percentage of second large shareholder. The positive coefficients between dividend to cashflow and both large shareholders and second large shareholders imply a positive correlation between both ownership variables. This also supports the notion of collaboration in determining PP conflicts between large and second large shareholders during M&A.

The control variable sales growth has negative coefficients across all models. The interpretation from the coefficients shows that a 100% reduction in sales growth will increase the dividend ratio by roughly 5% across all models. This may imply that paying a higher dividend results in lower company growth (Banchit & Locke, 2011). The dummy variable to indicate and control effective M&A also shows positive and significant coefficients.

Table 21: Robust analysis: PP conflicts (dividend to cash flows) using FEVD models

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Largest Shareholder	0.3623	0.3624	0.3626	0.1579	0.1580	0.1580
	(7.36)**	(7.02)**	(6.72)**	(2.25)*	(2.24)*	(2.14)*
Second large Shareholder				0.0034	0.0034	0.0034
				(3.95)**	(3.86)**	(3.69)**
LagDivCFI	-0.4612	-0.4637	-0.4654	-0.4612	-0.4639	-0.4657
ow						
	(0.2800)	(0.2800)	(0.2800)	(0.2800)	(0.2800)	(0.2800)
lnCashFlow	2.6568	2.6563	2.6545	2.6569	2.6562	2.6542
w						
	(3.99)**	(3.97)**	(3.78)**	(3.98)**	(3.96)**	(3.75)**
TDTA	-0.0118	-0.0119	-0.0117	-0.0118	-0.0119	-0.0117
	(0.2600)	(0.2600)	(0.2500)	(0.2600)	(0.2600)	(0.2500)
Beta	-0.0145	-0.0112	-0.0119	-0.0145	-0.0111	-0.0116
	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)
lnTotalAssets	0.1042	0.1041	0.1037	0.1042	0.1040	0.1036
	(0.6400)	(0.6400)	(0.6200)	(0.6400)	(0.6400)	(0.6200)
Sales1YrGrowth	-0.0537	-0.0537	-0.0535	-0.0537	-0.0537	-0.0535
	(2.43)*	(2.42)*	(2.35)*	(2.43)*	(2.42)*	(2.34)*
lnAge	0.0081	0.0081	0.0086	0.0081	0.0081	0.0085

	(0.1200)	(0.1200)	(0.1200)	(0.1200)	(0.1200)	(0.1200)
dY0	5.9141	5.9140	5.9139	5.9141	5.9140	5.9139
	(2.67)**	(2.67)**	(2.64)**	(2.67)**	(2.67)**	(2.64)**
lnValueTra nsacton	-0.0135	-0.0140	-0.0128	-0.0136	-0.0139	-0.0127
	(0.0300)	(0.0300)	(0.0300)	(0.0300)	(0.0300)	(0.0300)
PaymentCa sh	0.0975	0.0965	0.0962	0.0973	0.0967	0.0974
	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)
PaymentSh ares	0.0513	0.0479	0.0608	0.0512	0.0481	0.0614
	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)	(0.0100)
Toehold	0.0303	0.0246	0.0339	0.0304	0.0244	0.0339
	(0.0100)	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100
RelatedInd	-0.0524	-0.0509	-0.0812	-0.0527	-0.0506	-0.0803
	(0.0200)	-0.0200	-0.0300	-0.0200	-0.0200	-0.0200
Country control		Yes	Yes		Yes	Yes
Industry Control			Yes			Yes
Constant	-35.9614	-35.8850	-35.8306	-34.9933	-34.9137	-34.8556
	(2.97)**	(2.63)**	(2.45)*	(2.88)**	(2.54)*	(2.36)*
Observatio ns	669	669	669	669	669	669
F-test	863.98**	860.00***	841.42***	862.65***	858.67***	840.09***
	*					

Rho	0.570	0.570	0.570	0.570	0.570	0.570
Number of IDCODE	272	272	272	272	272	272
Absolute value of z statistics in parentheses(* significant at 10%; ** significant at 5%,*** significance at 1%)						

## **7.6 Principal-Agent (PA) conflicts and large shareholder**

The existence of PP conflicts in Asean 5 companies has been established in preceding empirical analysis. It is possible that PA conflicts may also be present in those settings where PP is present. Potentially, it is not as important as PP but it does warrant examination. The next hypothesis envisages there is a negative but insignificant relationship between PA, measured by asset utilisation ratio, and M&A in Asean 5 companies. If this is the case, then it implies that when companies are less efficient the greater the level of large shareholders in companies associated with M&A.

Table 22 presents the outcomes of HT analysis for this hypothesis. Models 2 and 3 are analysed by controlling for country and industry effects. Explanatory variables' joint significance results using Wald chi test statistic are significant. It is noteworthy that when proxy for PA conflicts is used as the dependent variable in Models 1 and 2, the coefficients of large shareholders are found to be negative and significant. The results indicate that there are decreases in every dollar of sales to assets of the company in response to 5% (Model 1) and 7% (Model 2) increases in shareholding percentage of the largest shareholder. This has an important implication for this study as not only are PP conflicts found to be rampant in Asean 5 M&A, but PA conflicts have also been indicated to be substantial as well.

The control variables that are positive and significantly related to efficiency are sales growth and risk (beta). This is in accord with higher risk and higher

efficiency attainment within the company. On the other hand, it is shown that negative relationships are found for the efficiency ratio and cash to total assets ratio, and the relatedness of the acquirer with target companies. This may imply that the higher cash resource the company has, the lower the efficiency attained. The negative relationship between relatedness of the acquisition to the target's industry may also indicate that related M&A could become more efficient instead by acquiring a non-related M&A.

Further analysis is undertaken checking whether the regression is non-linear by incorporating large shareholder square into the model using the FEVD method. Results shown in Table 23 indicates that the relationship is insignificant, both implying and supporting the linear relationship between PA conflicts and large shareholders in Asean 5 companies.

Table 22: HT regression analysis of PA conflicts (Asset utilisation ratio) and large shareholders  
(Testing: H15)

	(1)	(2)	(3)
	<b>Asset Utilisation ratio</b>		
<b>Large Shareholder</b>	<b>-0.053324</b>	<b>-0.070851</b>	<b>-0.053772</b>
	<b>(1.87)*</b>	<b>(1.71)*</b>	<b>(1.58)</b>
<b>TDTA</b>	<b>-0.001195</b>	<b>-0.001074</b>	<b>-0.001121</b>
	<b>(1.64)</b>	<b>(1.40)</b>	<b>(1.61)</b>
lnTotalAssets	-0.000818	-0.000837	-0.000823
	(0.50)	(0.49)	(0.54)
<b>Sales1YrGrth</b>	<b>0.001979</b>	<b>0.001996</b>	<b>0.001988</b>
	<b>(6.04)***</b>	<b>(5.91)***</b>	<b>(6.54)***</b>
lgage	-0.061570	-0.011019	-0.033912
	(0.77)	(0.12)	(0.42)
dY0	0.002670	0.003512	0.003703
	(0.11)	(0.14)	(0.16)
CashtoTA	-0.001309	-0.001285	-0.001163
	<b>(2.10)**</b>	<b>(1.94)*</b>	<b>(1.97)**</b>
Beta	-0.228903	-0.353484	-0.250735
	<b>(1.71)*</b>	<b>(1.76)*</b>	<b>(1.58)</b>
LnValueTrans	0.018515	0.030714	0.020547
	(0.49)	(0.64)	(0.49)

PaymentCash	-0.838793	-0.910640	-0.665844
	(1.24)	(1.14)	(0.98)
PaymentShare	-0.342917	-0.386764	-0.340778
	(1.17)	(1.13)	(1.13)
PaymentMixed	-0.293719	-0.643211	-0.554052
	(1.00)	(1.52)	(1.49)
<b>Related Target</b>	<b>-0.447661</b>	<b>-0.517787</b>	<b>-0.457966</b>
	<b>(1.84)*</b>	<b>(1.73)*</b>	<b>(1.75)*</b>
Toehold	0.001986	0.000654	0.001403
	(0.56)	(0.17)	(0.39)
Country		Included	Included
Industry			Yes
Constant	3.379710	5.201966	4.613865
	(2.88)**	(2.54)**	(2.59)**
Observations	719	719	719
Number of IDCODE	273	273	273
RHO	0.930	0.944	0.941
Wald Chi	44.22***	43.45***	53.74***
Absolute value of z statistics in parentheses (* significant at 10%; ** significant at 5%, significant at 1%)			

Table 23: PA conflicts using FEVD analysis

	(Model 1)	(Model 2)
<b>Asset Utilisation ratio</b>		
Lship	-0.000156	-0.000933
	(0.41)	(1.69)
Lshipsquare		0.000013
		(1.95)
Profitability	-0.000000	-0.000000
	(0.63)	(0.62)
LagProfitability	-0.000000	-0.000000
	(0.44)	(0.43)
lnCashFlow	0.038853	0.037879
	(8.02)***	(7.79)***
TDTA	-0.002367	-0.002361
	(6.78)***	(6.77)***
Beta	0.012723	0.013397
	(1.43)	(1.51)
lnTotalAssets	0.005143	0.004989
	(4.64)***	(4.49)***
Sales1YrGrth	-0.000001	-0.000001
	(0.81)	(0.81)
lnAge	-0.001254	-0.001317
	(2.56)**	(2.68)***
Constant	0.236726	0.259131
	(2.74)**	(2.97)***
Observations	1195	1195
R-squared	0.8541	0.8545
Absolute value of t statistics in parentheses	692.93***	631.78***
Absolute value of z statistics in parentheses (* significant at 10%; ** significant at 5%, significant at 1%)		

## 7.7 Summary

This chapter details the results of the research and analyses the information and statistical methods applied in the sample Asean 5 M&A data. PP and PA conflicts associated with M&A are tested using parametric and non-parametric analysis to check for significant changes. The relationship between PP conflicts, ownership, financial and M&A variables is elaborated in detail as well. There are also discussions about the econometric tests for endogeneity, autocorrelation and joint significance of the models. The controlling shareholders' incentives to pursue private benefits and interfere with investment decisions under weaker investor protection imply a higher dividend payouts. Table 24 in the following chapter summarises the results indicated by each analysis described earlier.

Overall, this study supports the indication that PP conflicts using three different measurements of dividend ratios are significant in Asean 5 acquiring companies. The first analysis using a univariate test support changes in dividend as PP conflicts proxy throughout three years before and after M&A. The significance of PP conflicts is generally observed during the second year after M&A becomes effective. The test for changes in PA conflicts, on the other hand, has shown no significant changes pre and post three years of M&A.

HT is regarded in this thesis as the main method for discussion. This is because the analysis has taken the problems of endogeneity and autocorrelation, time-invariant as well as the time-variant variables in the analysis. The implementation of other robust analysis such as Tobit analysis is to confirm the relationship of the

main estimator of large shareholder by adjusting the potential biases due to the presence of zero-dividend observations in the sample. The next robust analysis using the relatively new FEVD method is arguably by Greene (2010) as ‘illusory’ (p.1) because the steps are just using adjustments with ordinary least square (OLS) models. This will in fact produce estimators which are biased in the same way that OLS estimates are. However, it is worth noted to include this analysis in this because the strength of FEVD is that the coefficients remain consistent whenever HT is also consistent (Thomas Plümper & Vera E. Troeger, 2011). This is especially true when FE model has been shown in this chapter where the model drops and does not generate coefficients for time-invariant variables (for example large shareholder variables, other M&A variables).

Results from multivariate analyses of PP conflicts proxies using both dividend and performance measurement also suggest that large, controlling shareholders seem to be expropriating minority shareholders during M&A. It is shown that at a concentration threshold of 20%, the controlling shareholder gains significant control over the company and power to divert corporate resources to his/her own interests.

The evidence also reveals that there could be a possibility of a concave relationship implying a relationship opposite from the usual U-shaped relationship in some developed markets. At even higher concentration of shareholders, there seem to be a reduction in PP conflicts suggesting that large shareholders may regard that their wealth maximisation in the company overall outweighs their own private benefit.

Second largest controlling shareholders seem to team up with the largest shareholder in extracting private benefits for themselves. However, as the ownership percentage owned by the second large shareholder increases, this cooperation declines. This could mean that they may to some extent provide good monitoring to help reduce PP conflicts in these markets.

Results from multivariate analysis have also discerned that managers may also collaborate with large shareholders. This is shown from increased PA conflicts associated with M&A in Asean 5 markets when other financial and M&A variables are taken into account. The analysis casts some doubt that PP conflicts are the not the only main agency problems in these markets after all.

## **CHAPTER 8: CONCLUSION AND RECOMMENDATIONS**

### **8.1 Introduction**

This chapter provides a summary of findings of the empirical studies reported in Chapter 6 and Chapter 7 regarding PP conflicts in M&A activities in Asean 5. Section 8.2 presents recapitulation of this study which is followed by Section 8.3 that summarizes the focus of the study. This is followed by Section 8.4 with the key findings as presented in Chapter 6 and Chapter 7 including a summary of the results of pair wise correlation, changes in PP conflict, HT regression analysis, panel Tobit regression, FEVD, and analysis on PA conflict. Section 8.5 discusses contribution and implications of this study and Section 8.6 discusses the study's limitations. Suggestions for future research relating to the study are presented in Section 8.7. This chapter ends with concluding remarks in Section 8.8 which focuses on contributions of the findings of the thesis to the body of knowledge in the area of PP conflict and M&A specifically and to the theory of finance in general.

### **8.2 Recapitulation of study**

This study has investigated the possible PP conflicts that are caused by large shareholders associated with mergers and acquisitions (M&A) in Asean 5 (Indonesia, Malaysia, Singapore, Thailand and Philippines) acquiring companies. The main research objective is to determine whether large shareholders exacerbate

PP conflicts associated with M&A in Asean 5. The second objective is to assess whether second large shareholders help to exacerbate PP conflicts in Asean 5. The third objective is to probe the concentration threshold of expropriation level in Asean 5 M&A and the final objective is to investigate whether principal-agent (PA) conflict is a prominent problem for Asean 5 acquiring companies.

In order to achieve the objectives, the following research questions were considered: 1) What is the percentage of large shareholders of acquirers in Asean 5 companies? (2) Do dividend payouts change after M&A in Asean 5? (3) Do large shareholders exacerbate PP conflicts? If yes, at what percentage is the largest shareholders' threshold that has an impact on the PP conflict? (4) Do the second largest shareholders exacerbate PP conflicts? (5) Is principal-agent (PA) a prominent problem for acquirers in Asean 5 companies?

Through addressing these five questions, three major contributions to the understanding PP conflict can be derived from the thesis. The first contribution is that the thesis focuses on the major and growing phenomena of M&A activities in the Asean 5 economy. Secondly, this thesis addresses the empirical studies of PP conflict where, in contrast, most research often relies solely on agency theory and often the PA perspective of agency theory. Last but not least, the third contribution is that results have shown that PP conflicts and PA conflicts are found to be a major problem in Asean 5 M&A.

Most Asian companies experience the unique problem (Dharwadkar, et al., 2000) of PP conflicts but previous research focuses mainly on the PA conflicts. Such

studies in developed countries usually find agency conflicts have a negative impact on company value. Questions remain unanswered as to how rampant is PP conflicts in Asean 5, especially in the context of M&As. Decision makers and investors, especially minority shareholders, can utilise the findings to understand the impact of M&A initiatives on their funds invested and the related risks and potential gains. Empirical models associated with this analysis will be of assistance for investors in the evaluation of their investment strategies.

### **8.3 Focus of the study**

This study focuses on the less popular and relatively new area in finance literature known as PP conflicts. The motivation for this study arises from the contended issue that in some countries, the agency problem is probably not the infamous PA conflicts, which is between the shareholders and the managers, but it may be between the shareholders themselves, more specifically between the controlling shareholders and minority shareholders within the corporation itself. If it is indeed PP conflicts that really matter in some countries and not PA conflicts, this will change the landscape of corporate governance which has always focussed on PA conflicts with very little attention paid to PP conflicts by business, authorities, regulators, practitioners, and academicians. In fact, the impact of PP conflicts may be more detrimental than PA conflicts in some countries.

PP conflicts may be evidenced and significant in a situation when a corporation goes through M&A activities. During M&A, controlling shareholders may have opportunities to expropriate income and profit of the corporation that benefit

themselves at the expense of minority shareholders. One of the opportunities is dividends, as controlling shareholders through their directorship representation on the board of directors, possess influence on the amount of dividends to be paid out. The payment of dividends via profits is designed to preserve the company's capital. The dividends will be paid out of profits that need to be available at the time dividends are declared and not at the time of actual payment. In addition, payment of dividends to shareholders is a trade-off for higher retained earnings which are a source of low-cost funds to the corporation for future expansion.

As opposed to the controlling shareholders, minority shareholders have little voice and influence at all in matters pertaining to dividends. Thus, M&A clearly represents a situation where controlling shareholders have the opportunity and may take that opportunity to expropriate corporation income in the form of dividends to benefit themselves. Obviously, minority shareholders will also receive dividends. However, it should be noted that controlling shareholders who make the decisions on dividends through their board representation may make the decisions that benefits them in the short term rather than for the long-term prospect of the corporation, which thus may not be in the best interest of the corporation or the minority shareholders.

Asean 5 countries represent an excellent opportunity to study PP conflicts in M&A activities. These five countries are all neighbouring countries in South East Asia and are the founding members of an economic trade zone area known as Association of South East Asian Nation or ASEAN. Although they are closely related to each other, their regulatory framework, structure of capital market, and

stage of economic development are not at all the same. In Chapter 3, this thesis provides detailed explanation of the structure of capital markets in each of the 5 countries, regulatory framework of M&A activities in each of the 5 countries, and regulations pertaining to shareholders protection and dividend policy in each of the 5 countries. The similarities and differences of these regulations and practices provide diversity to the study, as well as complexity.

To enrich this study in terms of the methodology and modelling structure, it includes time-invariant and time-variant variables in the panel data model analysis to provide an additional confirmation of the veracity of the modelling and robustness analysis. The HT and FEVD techniques are employed since most of the variables used in this study have very limited within variance and as such does not fit the traditional panel data estimators. The model generated in this study is specified with the PP proxy and is explained by a set of time-varying, time-invariant and rarely changing variables. Robust analysis using Tobit regression is also being implemented in this study.

The task of collecting data was not straightforward and while appropriate to recognise efforts by various databases to collect and compile helpful sources, there remains much more work to be done in terms of manual collection of data from annual reports. These data are sourced from the SDC M&A Database, SDC Ownership database and Thomson One Banker Database. Further data have been collected from companies listed in the individual stock exchange markets of the five countries. The exercise leads to the final sample which comprises of 1,013 deals (807 acquiring companies) from years 2000 to 2008 in various industries.

## 8.4 Summary of key findings

Table 24 presents the summary of key findings for each hypothesis from this study. The discussion presented in Chapter 6 and Chapter 7 started with descriptive statistics which show an uneven distribution of the number of effective M&A deals, and the number of M&A deals in the final sample among the five countries. This has been highlighted as the main limitation of this study. In some analysis, observations from Indonesia and Philippines have to be excluded to avoid numerical instability. For example, while conducting regression analysis in Stata software, it was discovered that the dummy regressors are collinear with other independent regressors and thus, it was necessary to drop the observations from these two countries from the model.

The descriptive statistics further show the characteristics of the bidding firms with a list of variables being grouped into dependent variables and independent variables. The six dependent variables are dividend/cash flow, dividend/earnings, dividend/sales, dividend/market capitalization, Efficiency Ratio, and Tobin's q. On the other hand, the independent variables are grouped into four groups, namely ownership variables, financial variables, M&A variables, and industry and country dummies.

Descriptive results depicted in Table 8 answer the first research question and show that the average largest shareholding is 32% while the second largest shareholder is 11%. This average figure answers the first research question in this study. The maximum percentage of shares owned by one entity of shareholder is

88% and the second shareholder is 37%. This picture confirms that shareholding in Asean 5 countries is highly concentrated consistent with other studies (Claessens, et al., 2000b; Faccio, et al., 2001b).

This study provides six main empirical analyses which are summarised as pairwise correlation results in Section 8.4.1, analysis of PP and PP conflicts changes associated with M&A in Section 8.4.2, panel regression empirical results in Section 8.4.3, panel Tobit regression of PP conflicts and explanatory variables in Section 8.4.4, FEVD of PP conflicts and explanatory variables in Section 8.4.5, and PA conflicts and large shareholders in Section 8.4.6. The summary of hypotheses is presented in Table 24 as below.

Table 24: Summary of hypotheses results

Hypothesis	Findings	
	Paired t test	Wilcoxon
H1a: Acquiring companies' dividend is lower before M&A	Fail to reject H1a (Pre & post 2 and 3 years)	Fail to reject H1a (Pre & post 2 and 3 years)
H1b: Acquiring companies' dividend is higher after M&A	Fail to reject H1b (Pre & post 2 and 3 years)	Fail to reject H1b (Pre & post 2 and 3 years)
H14a: Acquiring company's asset utilisation ratio is higher before M&A	Reject H14a (insignificant)	Reject H14a (insignificant)

H14b: Acquiring company's asset utilisation ratio is lower after M&A	Reject H14a (insignificant)	Fail to reject H14b (Pre & post 3 years)	
<b>Multivariate analysis</b>	<b>HT</b>	<b>Tobit</b>	<b>FEVD</b>
H2a: There is a positive relationship between the largest shareholder and PP conflicts associated with M&A  H2b: There is a negative relationship between large shareholders and PP conflicts (performance measurement) associated with M&A	Fail to reject H2a  Negative coefficient (insignificant)	Fail to reject H2a  N/A	Fail to reject H2a
H3a: The ownership by large shareholder is non-linearly related to PP conflicts associated with M&A.  H3b: There is a positive relationship at high levels of ownership and a negative relationship at low levels of ownership.	Fail to reject H3a  Fail to reject H3b	N/A	Fail to reject H3a
H4: There is a positive relationship between the largest shareholders concentrated (at 5%, 10%, 20%, 30%, 40% and 50% cut off) and PP conflict associated with M&A.	Fail to reject H4 (Significant at 20% and above threshold)		
H5: There is a negative relationship between second largest shareholders with PP conflicts associated with M&A.	Negative coefficient (though insignificant)		Fail to reject H5
H6: There is a negative relationship between leverage and PP conflicts associated with M&A	Negative coefficient (insignificant)	Fail to reject H6 (div to earnings)	Negative coefficient (insignificant)
H7: There is a negative relationship between PP conflicts and growth rate associated with M&A	Fail to reject H7	Fail to reject H7 (div to earnings)	Negative coefficient (insignificant)

H8: There is a positive relationship between company size and PP conflicts associated with M&A	Reject H8 (Negatively significant)	Reject H8 (insignificant)	Reject H8 (insignificant)
H9: There is a positive relationship between company age and PP conflicts	Positive coefficient (insignificant)	Reject H9 (inconclusive)	Positive coefficient (insignificant)
H10: There is a negative relationship between M&A values and PP conflicts	Negative coefficient (insignificant)	Negative coefficient (insignificant)	Negative coefficient (insignificant)
H11a: There is a positive relationship between payment method using cash and PP conflicts	Positive coefficient (insignificant)	Fail to reject H11a	Positive coefficient (insignificant)
H11b: There is a negative relationship between payment method using shares and PP conflicts	Reject H11b	Reject H11b (inconclusive)	Reject H11b (inconclusive)
H12: There is a positive relationship between toehold companies with PP conflicts	Reject H12 (insignificant)	Reject H12 (inconclusive)	Reject H12 (inconclusive)
H13: There is a negative relationship between related target companies with PP conflicts	Negative coefficient (insignificant)	Negative coefficient (insignificant)	Negative coefficient (insignificant)
H14c: There is a negative relationship between largest shareholders and PA conflicts associated with M&A	Fail to reject H15		Negative coefficient (insignificant)

#### **8.4.1 Pair wise correlation results**

Table 10 shows the pair wise correlation matrix between the dependent and independent variables in the study. The highest correlation is 51.14% between dividend to cash flow and dividend to market capitalisation ratios. All the dividend ratios and efficiency ratios are found to be significantly correlated with each other which illustrate their tendency to vary together. Except for dividend to sales ratio, PP proxies for dividend show positive and significant correlation

coefficients with concentrated ownership consisting of large shareholders, large shareholder square and second large shareholders.

This result thus offers strong support to the preliminary hypothesis that there is evidence of PP conflict using dividend ratios when there are large shareholdings within companies in Asean 5 during M&A.

#### ***8.4.2 Analysis of PP and PP conflict changes associated with M&A***

This section answers the second research question whether dividend payout changes after M&A in Asean 5. The result for this analysis is shown in Table 11. Post M&A dividends (ratio of cash flow, earnings, and market capitalization) increased significantly after two years of effective M&A. This may indicate that PP conflict shows indefinitely after the second year of the acquiring companies. There is an increase of dividend in the first year but the expropriation by the large shareholders can only be seen after the second year of M&A as these companies are probably more stable by then and have more cash resources internally for dividend payouts.

The asset utilisation ratio or total sales-total asset ratio (proxy for PA conflicts) does not show a significant change pre- and post-M&A. This supports the view so far, without a thorough analysis that PA conflicts may not be the agency problem in Asean 5, particularly in an M&A setting and that calls for further investigation.

#### **8.4.3 Panel regression results: HT method**

The third research question in the study that seeks to find out if large shareholders in Asean 5 M&A exacerbate PP conflicts? The results generated in all models shown in Table 14, that there is a significant relationship between PP conflicts and large shareholders. The results remain significant even after controlling for country and industry effects. These results thus are in accord with the hypothesis that PP conflict increases with the level of shareholdings by the largest shareholder in M&A activities in Asean 5. Thus, this thesis argues that in Asean 5, the higher payout of dividends after a major and expensive investment of M&A indicates higher expropriation by controlling shareholders. The notion of this is strengthened when the growth rate of the company is negatively related to the PP conflicts metric. This shows that as dividend paid more during M&A, the growth rate of the company seems to be falling.

The comparative results of PP conflicts between countries in Asean 5 and among the 15 industries are presented in Appendix 5. Malaysian companies with large shareholders seem to pay higher dividend rates than the other four countries. As for the industry effects on PP conflicts, results show that four industries, namely food, clothes, transportation and retail stores have significant effects on PP conflicts using all three dummy variables. As such, this study suggests that there is a significant relationship between PP conflicts using dividends and the independent variables even after controlling for industry.

This study suggests that for Asean 5, the relationship between PP conflicts and large shareholder is concave, which means that dividends increase with ownership

of the largest shareholder; however dividend payout ratios start to decrease as the percentage continuously increasing. The possibility of large shareholders unwilling to pay higher tax at this higher end is investigated and it is found that the insignificant coefficient results for all specifications confirm the notion that tax payments do not influence dividend policy (La Porta et al., 2000b). The possibility of this finding may be that large shareholder during an M&A process act as a monitoring role at the lower end and higher end of dividend policies. However, the role shifts to entrenchment behaviour at the increasing stage of ownership to the point that they are in the position to extract company's earnings associated with M&A.

This study supports previous studies on this issue and thus suggests that for Asean 5, older companies with higher concentration of large shareholder have higher dividend payout ratios, and this is especially so when concentration of large shareholders increases. When testing the concentration threshold cut-off or subgroup, significant relationships are to be found when the coefficient of the largest shareholder is at 20% and more. This finding affirms that for Asean 5 countries, PP conflicts is significant at a minimum ownership concentration level of 20% and PP conflicts increases as the level of ownership concentration increases.

The fourth research question is asking do second large shareholders exacerbate PP conflicts. Previous studies in developed markets suggest that the presence of a second largest shareholder may act to curb expropriation from the controlling shareholder. In this study, the role of second shareholder is tested. The negative but insignificant coefficients upon addition of the second large shareholder as

another variable suggest that there is no relationship between PP conflicts and second large shareholder. This is aligned with the notion that second largest shareholder has no impact to dividend ratio policy in East Asian companies (Claessens et al. 2000a) and is still true during M&A activities.

The results on the utilisation of Tobin's q as a proxy for PP conflicts are presented in Table 18. The results show that the coefficients of large shareholders are negative, but insignificant. This result suggests that as large shareholders increase, company performance tends to deteriorate. However, this remains inconclusive due to the insignificant p-values. The question remains if whether using a performance-based study to explore expropriation is sufficient in the context of the Asean market. This is because financial data may be manipulated by the large, controlling shareholders as well as the managers to project better performance.

#### ***8.4.4 Robust analysis: Panel Tobit regression of PP conflicts and explanatory variables***

Tobit regression analysis is a robust method used to test whether large shareholders also play a part in the decision to pay or not to pay dividends in Asean 5 acquiring companies. This analysis is necessary given that there are companies in the sample that do not pay out dividends. The coefficient results on large shareholders are positive and significant across all models. Tobit regression also supports the hypothesis that there is a non-linear relationship between the large shareholder and PP conflicts in Asean 5 M&A. This again supports the notion that large shareholders of acquiring companies in Asean 5 play a main role in deciding to pay out dividends.

#### **8.4.5 Robust analysis: FEVD of PP conflicts and explanatory variables**

FEVD analysis is also used to allow for time-invariant variables (large shareholder and M&A variables) to be incorporated in the regression models. The results indicate that the large shareholders' explanatory variable is significant and positive. The positive sign implies that as dividends increase the percentage level of large shareholders grows. This method also support results from HT analysis whereas dividend payouts as indication of PP conflicts increased, the growth rate of the company is falling significantly. There is also support for a non-linear relationship between large shareholders and PP conflicts.

The coefficients for second large shareholder are found to be positive, similar to using HT analysis. However, FEVD shows it to be significant. There is an increase of dividend ratio of 0.34 with an increase of 1% in the percentage of second large shareholder. This may support the notion of collaboration in determining PP conflicts between large and second large shareholders during M&A.

#### **8.4.6 PA conflict and large shareholders**

HT analysis is used to test the hypothesis that there is a negative but significant relationship between PA conflict and large shareholders using asset utilisation ratio associated with M&A in Asean 5 companies. The results shown provide the answer to the last research question in this thesis whether principal-agent (PA) conflict is a prominent problem for the acquiring companies in Asean 5. The analysis probe an important implication where not only are PP conflicts found to be rampant in Asean 5 M&A, PA conflict is also substantial. The results also

indicate that there is a linear relationship between PA conflict and large shareholders in Asean 5 companies. The negative relationship between relatedness of the acquisition to the target's industry may also indicate that it might be more efficient to acquire a non-related industry when undertaking M&A.

## **8.5 Contribution and implication of the study**

This thesis provides profound evidence of the existence of PP conflicts in M&A activities in Asean 5 countries. These are supported in the hypotheses by La Porta et al (1998) and Claessens et al (1999) that concentrated ownership leads to conflict of interest between controlling shareholders and minority shareholders. Companies examined in this study tend to pay higher dividends to their shareholders post M&A. The growth rate of these companies has been found to be deteriorating with higher payment of dividends paid out to the shareholders. In addition, this study also provides concrete evidence that PA conflict is also relevant in Asean 5 countries, which strongly contradicts some literature. Thus, the main contribution of this study is to affirm with empirical evidence that in Asean 5 countries during M&A activities, the conflicts that are relevant and, more importantly need to be addressed, are the conflicts among large shareholders as well as the traditional principal-agent conflicts.

This study has provided two alternative measurements for PP conflicts. The two measurements, namely the dividend ratio used in the accounting-based measurement and Tobin's q. The accounting-based measurement measures the actual dividend payout of the acquiring companies' pre- and post- M&A, while the market-based measurement of Tobin's q measures the firm values as

perceived by investors as a result of the business combination. The inconsistencies in the performance-based results have practical implication for investors and minority shareholders. It shows that expropriation by large shareholders might not be fully reflected in the predominant research on market-based performance measurement. Given that most of the Asean market is less efficient compared with developed markets; the availability of dividend ratio policies to the public should provide a more reliable indicator for PP conflicts.

Although there are differences in dividend policies among the Asean 5 countries, in general, payment of dividends is at the discretion of boards of directors. There are just several skeleton rules and regulations pertaining to payment of dividends but none of them has been enforced specifically to curb PP conflicts. As this study provides evidence of the existence and influence of PP conflicts in M&A activities in Asean 5 countries, it is appropriate for authorities, regulators, and policy makers to introduce a measure to curb or limit the extent of PP conflicts as well as PA conflict in M&A activities. This thesis suggests an upper limit of dividend payout ratio post-M&A that a company must adhere to as a measure to ensure that controlling shareholders are not expropriating company income via payment of high dividends to shareholders.

Additionally, this study adopts HT and FEVD regression methods to control for endogeneity effect and reverse causality of independent and dependent variables of dividend, performance, other control and M&A to provide robust results. Most previous studies do not explore these problematic effects that may produce bias coefficient results, while some use 2SLS regression technique that requires strict

suitability in choosing a proper instrumental variable (IV) in the model. More importantly, these methods allow for the challenge of incorporating time-variant and time-invariant variables into the same model. The current research extends the econometric robustness of analysis using Tobit regression.

Much attention has been given to the impact of M&A performances examining for abnormal returns for market based research or accounting based returns using profitability ratios. Other M&A research also involve activities on employees both of the acquiring companies and the target companies. This includes matters pertaining to redundancy, employees' benefits, remuneration of boards of directors, compensation to chief executive officers, and branding issues. Nevertheless, such research focuses on PA conflicts and deliberately ignores the existence of PP conflicts, either because of lack of understanding of the existence and impact of PP conflicts, or because there has been no previous study that measures and explains PP conflicts in Asean 5 countries. Regardless of the reason, it is understandable that PP conflicts have been ignored because it is a relatively new discovery as opposed to the more well-known and widely-researched PA conflict.

The seriousness of this study's findings should not be understated. Rules and regulations in financial markets are drawn and enforced based on the understanding of the authorities, regulators, and policy makers. If previously these parties have been relying on their understanding of PA conflicts only and thus drafted their rules and regulations based on this understanding, it is now clear with profound evidence that they are missing significant and important information regarding conflicts, namely, PP conflicts.

This study is useful especially for non-controlling or minority shareholders who provide capital funds in exchange for risky returns, especially in the context of large shareholders making M&A investment decisions that may compromise the benefit to overall company value.

Findings from this study thus conclude that both PP and PA conflicts are relevant and significant in Asean 5 countries. These findings provide a new dimension for the authorities, regulators, and policy makers in Asean 5 countries, such as Financial Institutions Supervisory Board (Bapepam-LK) in Indonesia, Securities Commissions in Malaysia, Securities Industry Council in Singapore, Securities Regulation Code (SRC) in Philippines and The Securities Exchange Commission (SEC) in Thailand. Not undermining the importance of these matters, authorities, regulators, and policy makers in Asean 5 countries should now also acknowledge the importance of having rules and regulations pertaining to expropriation of income by large, controlling shareholders.

At the time that this thesis is written, only Malaysia and Singapore have special M&A regulations to regulate the M&A activities conducted there. Hence, it is about time that the other markets in the Asean region to address the issue of regulating and implementing M&A guidelines to monitor the inevitable growing M&A activities in their market to promote investments.

## **8.6 Limitations of the study**

Having an uneven distribution of the number of effective M&A deals among the five countries included in this study has been highlighted as its main limitation. The sample data clearly noted the low number of effective M&A deals in Indonesia and Philippines while Malaysia dominates by having the highest number of effective M&A deals. As a result, observations from Indonesia and Philippines have to be excluded from the model when conducting regression analyses.

Being a multi-country study, albeit from the same region, this study has to deal with diversity of regulatory framework and non-standardized rules and regulations pertaining to M&A and dividend policy. Although there are similarities among these rules and regulations, the differences cannot be ignored. Being the most developed country among the five countries and positioned as a major financial centre in Asia, Singapore has more structured and internationally common rules and regulations. As for Malaysia, there are issues pertaining to shareholders protection and foreign investment that are more restrictive and unique. On the other hand, Thailand is progressing well in liberalization of its financial sector and thus is changing to attract foreign investment. The financial markets in Indonesia and Philippines are still developing and have not reached the level of maturity enjoyed by Singapore and Malaysia. As such, findings of this study are generalized for the Asean 5 countries and should not be referred specifically for any single country.

Data for this study are mainly sourced from Securities Data Corporation's (SDC) Platinum<sup>TM</sup> *Worldwide Mergers & Acquisition Database* which are comprised of information collated and gathered from annual reports of public listed companies in the five countries from 2000 to 2008. Although there is a requirement for disclosure of top 20 shareholders in the annual reports of public listed companies in the Asean 5 countries, there is no restriction for the use of nominee account name as shareholders. Thus, as a result of this leniency, many large shareholders display the nominee account name when listing top 20 shareholders in their company annual reports. As such, there may be cross-holding of large shareholders in the top 20 shareholders of a company or cross-holding of large shareholders in the top 20 shareholders of multiple companies that cannot be detected by the database. Unfortunately, empirical research conducted in this thesis is limited to using the data as collated and gathered by Securities Data Corporation's (SDC) Platinum<sup>TM</sup> *Worldwide Mergers & Acquisition Database*.

## **8.7 Suggestions for future research**

Due to unavailability of data, this study has been limited to analysing PP conflicts arising in M&A activities. However, M&A alone is not the only major corporate restructuring exercise. Changes in ownership structure may happen without involving M&A, and PP conflicts may be evidenced and prevalent in such cases. In addition, companies may also undergo major restructuring as a result of a significant individual investment project which, again, may attract PP conflicts. These areas are not covered in this thesis and may be explored for further research.

Furthermore, this thesis is limited in studying the impact of PP conflicts on minority shareholders. Expropriation of income by controlling shareholders is indeed very detrimental to minority shareholders and should be investigated. While acknowledging the importance of a proposed study on minority shareholders, researchers may face a daunting task to gather data on minority shareholders as information on minority shareholdings is not required to be disclosed in the annual reports of public listed companies, at least in Asean 5 countries. An initial study may be conducted in other developed countries in Europe and North America where information on minority shareholdings can be obtained.

This thesis also only analyses PP conflicts from the perspective of acquiring companies. The impact of PP conflicts on target companies is not explored in this thesis and thus represents an opportunity for further research. Again, data gathering may be more difficult given that not all of the target companies are public-listed companies. If an M&A involves a private company as the target entity, information on the target company may be difficult to obtain.

The region that comprises Asean 5 countries has been identified as a region that provides exceptional opportunities to businesses and investors. The buoyant economies of the five countries bring along a wave of corporate restructuring activities which include M&A. These M&A deals may be done with good intention to expand the business and eventually enhance shareholder wealth. However, it should also be acknowledged shareholders and managers may take

advantage of an M&A deal to benefit them. Unfortunately, many M&A deals are too complex and complicated for small and minority shareholders to understand, and thus 'greedy' large shareholders may expropriate income from the company for their own private benefits.

Ownerships of Asean 5 companies are concentrated in the period of analysis in this thesis that suggest strongly for corporate dividends to be an indicator for PP conflicts and hence, may prevent from the problem of expropriation by large shareholders from escalating in the event of M&A.

As a result of these findings, authorities, regulators, and policy makers in Asean 5 countries should change their perspective on rules and regulations pertaining to M&A. As such, they should treat the findings of this study as an eye-opener; that they have been ignoring an important side of conflicts which have now been found to have significant impact on firm performance and affecting interests of minority shareholders. More importantly, their ignorance has provided opportunities for unscrupulous controlling shareholders to expropriate from minority shareholders. Thus, it is extremely important for the authorities, regulators, and policy makers in Asean 5 to have a regulatory body for each market, to realise the importance and significance of this study so that they can effectively introduce and enforce effective mechanisms, rules and regulations that can prevent, curb, or at least minimise expropriation by controlling shareholders which is identified in this thesis as PP conflicts.

Findings of this study provide empirical evidence that may affirm the existence of PP conflicts in M&A activities in Asean 5 countries. Alongside this issue, PA conflict is also found to be rampant in Asean 5 countries. As such, this thesis

concludes that in Asean 5 countries during M&A activities both conflicts are relevant and should be addressed and this study may carve a different way of thinking for regulators in this region. The potential for further studies on these issues is immense.

## REFERENCES

- Abdulrahman, A. A.-T. (2007). Dividend policy and payout ratio: Evidence from the Kuala Lumpur stock exchange. *Journal of Risk Finance*, 8(4), 349-363. doi: 10.1108/15265940710777306
- Adjaoud, F., & Ben-Amar, W. (2010). Corporate governance and dividend policy: Shareholders' protection or expropriation? *Journal of Business Finance & Accounting*, 37(5-6), 648-667. doi: 10.1111/j.1468-5957.2010.02192.x
- Ahmad, A. C., Ishak, Z., & Manaf, N. A. (2003). Corporate governance, ownership structure and corporate diversification: Evidence from the Malaysian listed companies. *Asian Academy of Management Journal*, 8(2), 67-90.
- Aivazian, V., & Booth, L. (2003). Do emerging market firms follow different dividend policies from US firms? *The Journal of Financial Research*, XXVI(3), 371-387.
- Akhter, S., & Daly, K. J. (2009). Finance and poverty: Evidence from fixed effect vector decomposition. *Emerging Markets Review*, 10, 191-206. doi: 10.1016/j.ememar.2009.02.005
- Al-Kuwari, D. (2009). Determinants of the dividend policy in emerging stock exchanges: The case of GCC countries. *Global Economy & Finance Journal*, 2(2), 38-63.
- Al-Malkawi, H.-A. N. Y. (2005). *Dividend policy of publicly quoted companies in emerging markets :The case of Jordan*. University of Western, Sydney. Retrieved from <http://handle.uws.edu.au:8081/1959.7/819>
- Al-Malkawi, H.-A. N. Y. (2007). Determinants of corporate dividend policy in Jordan: An application of the Tobit model. *Journal of Economic & Administrative Studies*, 23(2), 44-70.
- Albuquerque, R., & Wang, N. (2008). Agency conflicts, investment, and asset pricing. *The Journal of Finance*, 63(1), 1-40. doi: 10.1111/j.1540-6261.2008.01309.x
- Alchian, A. A., & Demsetz, H. (1972). Production, information costs, and economic organization. *American Economic Review*, 62, 777-795.
- Ali, R., & Gupta, G. S. (1999). Motivation and outcome of Malaysian takeovers: An international perspective. *Vikalpa*, 24(3), 41-49.
- Allen, F., & Bernardo, A. E. (2000). A theory of dividends based on tax clienteles. *The Journal of Finance*, 55(6), 2499-2536.
- Allen, F., & Michaely, R. (2002). Payout policy. *Handbook of the Economics of Finance*. 1(A), 337-429.
- Amihud, Y., Lev, B., & Travlos, N. G. (1990). Corporate control and the choice of investment financing: The case of corporate acquisitions. *The Journal of Finance*, 45(2), 603-616.
- Andrade, G., Mitchell, M., & Stafford, E. (2001). New evidence and perspective on mergers. *The Journal of Economic Perspectives*, 15(2), 103-120.
- Andres, C., Betzer, A., Goergen, M., & Renneboog, L. (2009). Dividend policy of German firms: A panel data analysis of partial adjustment models. *Journal of Empirical Finance*, 16(2), 175-187.
- Ang, J. S., Cole, R. A., & Lin, J. W. (2000). Agency costs and ownership structure. *The Journal of Finance*, 55(1), 81-105.
- ASEAN. (2009). Association of Southeast Asian Nations (ASEAN) from [http://www.aseansec.org/about\\_ASEAN.html](http://www.aseansec.org/about_ASEAN.html)

- ASEAN Exchanges. (2012). ASEAN: The world's growth market.
- Asquith, P., & Mullins, D. W., Jr. (1983). The impact of initiating dividend payments on shareholders' wealth. *The Journal of Business*, 56(1), 77-96.
- Avery, C. C., Chevalier, J. A., & Schaefer, S. (1998). Why do managers undertake acquisitions? An analysis of internal and external rewards for acquisitiveness. *Journal of Law, Economics and Organizations*, 14(1), 24-43.
- Bae, K. H., Kang, J. K., & Kim, J. M. (2002). Tunneling or value added? Evidence from mergers by Korean Business Group. *The Journal of Finance*, 57(6), 2695-2740.
- Bagwell, L. S., & Shoven, J. B. (1989). Cash distributions to shareholders. *Journal of Economic Perspectives*, 3(3), 129-140.
- Bahng, J. S., Lee, H., & Jeong, H. C. (2011). Adjustment behaviours of dividend payouts in G7 countries: A different look. *Australian Journal of Business and Management Research*, 1(9), 53-72.
- Baker & McKenzie. (n.d.). Mergers & acquisitions in Thailand, from <http://www.bakermckenzie.com/Thailand/MergersAcquisitions/>
- Baker & McKenzie Ltd. (2005). Guide to mergers and acquisitions:Thailand. Swiss: Baker & McKenzie International.
- Baker & McKenzie Wong & Leow. (2005). Guide to mergers and acquisitions: Singapore. Swiss: Baker & McKenzie International.
- Baltagi, B. H. (2005). *Econometric analysis of panel data* (Third ed.). Chichester (UK): John Wiley & Sons.
- Banchit, A., & Locke, S. (2011). Principal-principal conflicts: Is it a big problem in ASEAN 4 markets? *International Business Research Review Papers*, 2(5), 1-15.
- Barclay, M. J., & Holderness, C. G. (1989). Private benefits from control of public corporations. *Journal of Financial Economics*, 25, 371-395.
- Barontini, R., & Siciliano, G. (2003). *Equity prices and the risk of expropriation: an analysis of the Italian stock market*. ECGI Working Paper Series in Finance. Retrieved from [http://ssrn.com/abstract\\_id=443220](http://ssrn.com/abstract_id=443220)
- Baum, C. F. (2006). *An introduction to modern econometrics using Stata*. State College, TX: StataCorp.
- Baum, C. F., Schaffer, M., & Stillman, S. (2003). *Instrumental variables and GMM: Estimation and testing*. Working Paper No.545. Boston College. Boston, MA.
- Bebchuk, L., Kraakman, R., & Triantis, G. (1999). *Stock pyramids, cross-ownership, and dual class equity: The creation and agency costs of separating control from cash flow rights* NBER Working Paper 6951. National Bureau of Economic Research. Cambridge, MA.
- Becht, M., Franks, J., Mayer, C., & Rossi, S. (2010). Returns to shareholder activism: Evidence from a clinical study of the hermes UK focus fund. *Review of Financial Studies*, 23(3), 3093-3129. doi: 10.1093/rfs/hhn054.ra
- Becht, M., & Röell, A. (1999). Blockholdings in Europe:: An international comparison. *European Economic Review*, 43(4-6), 1049-1056. doi: 10.1016/S0014-2921(98)00113-5
- Ben-Amar, W., & Andre, P. (2006). Separation of ownership from control and acquiring firm performance: The case of family ownership in Canada. *Journal of Business Finance and Accounting*, 33(3), 517-543. doi: 10.1111/j.1468-5957.2006.00613x

- Ben Amar, W., & Andre, P. (2006). Separation of ownership from control and acquiring firm performance: The case of family ownership in Canada. *Journal of Business Finance and Accounting*, 33(3), 517-543. doi: 10.1111/j.1468-5957.2006.00613x
- Bena, J., & Hanousek, J. (2008). Rent extraction by large shareholders: Evidence using dividend policy in the Czech Republic. *Finance a úvČr -Czech Journal of Economics and Finance*, 58(3-4), 106-130.
- Berle, A. A., & Means, G. C. (1932). *The modern corporation and private property*. New York: Macmillan Company.
- Bertrand, M., Mehta, P., & Mullainathan, S. (2002). Ferreting out tunnelling: an application to Indian business groups. *Quarterly Journal of Economics*, 118, 121-148.
- Berzins, J., Bohren, O., & Stacescu, B. (2011). *Dividends and stockholders conflicts: A comprehensive test for private firms*. Paper presented at the 18th Annual Meeting of the Multinational Finance Society LUISS Guido Carli University, Rome, Italy.
- Betton, S., Eckbo, B. E., & Thorburn, K. (2009). Merger negotiations and the toehold puzzle. *Journal of Financial Economics*, 91, 158-178. doi: 10.1016/j.fineco.2008.02.004
- Bhagat, S., & Jefferies, R. H. (2002). *The econometrics of corporate governance studies*. Cambridge, Massachusetts: The MIT Press.
- Bhattacharya, S. (1979). Imperfect Information, Dividend Policy, and "The Bird in the Hand" Fallacy. *The Bell Journal of Economics*, 10(1), 259-270.
- Bhaumik, S. K., & Selarka, E. Does ownership concentration improve M&A outcomes in emerging markets? Evidence from India. *Journal of Corporate Finance*(0). doi: 10.1016/j.jcorpfin.2012.04.001
- Bigelli, M., & Mengoli, S. (2004). Sub-optimal acquisition decisions under a majority shareholder system. *Journal of Management and Governance*, 8, 373-405.
- Bond, S., Elston, J. A., Mairesse, J., & Mulkay, B. (2003). Financial factors and investment in Belgium, France, Germany, and the United Kingdom: A comparison using company panel data. *The Review of Economics and Statistics*, 85(1), 153-165.
- Bond, S., & Meghir, C. (1994). Financial constraints and company investment. *Fiscal Studies*, 15(2), 1-1. doi: 428613; 35366
- Box, G. E. P., Hunter, J. S., & Hunter, W. G. (2006). *Statistics for experimenters : design, innovation, and discovery* (2nd ed.).
- Bradley, M., Capozza, D. R., & Seguin, P. J. (1998). Dividend policy and cash-flow uncertainty. *Real Estate Economics*, Winter(26), 555-580.
- Breusch, T., Ward, M. B., Nguyen, H., & Kompas, T. (2010). *On the fixed-effects vector decomposition*. MRPA Paper No. 21452. Retrieved from Munich Personal RePEc Archive <http://mpra.ub.uni-muenchen.de/26767/>
- Brigham, E. F., & Ehrhardt, M. (2005). *Financial management: Theory and practice* (11th ed. ed.). Mason, OH: South-Western/Thomson Learning.
- Brigham, E. F., & Houston, J.F. (2010). *Essentials of financial management* (2nd ed.). Singapore: Cengage Learning.
- Brown, R. A. (2006). *The rise of the corporate economy in Southeast Asia*. London, United Kingdom: Routledge.
- Bruner, F. R. (2002). Does M&A pay? *Journal of Applied Finance*, Spring/Summer, 48-68.

- Burkart, M., & Lee, S. (2008). One share-one vote: The theory. *Review of Finance*, 12, 1-49. doi: 10.1093/rof/rfm035
- Buysschaert, A., Deloof, M., & Jegers, M. (2004). Equity sales in Belgian corporate groups: Expropriation of minority shareholders? *Journal of Corporate Finance*, 10(1), 81-103. doi: 10.1016/S0929-1199(02)00047-0
- Cameron, C., & Trivedi, P. K. (2009). *Microeconometrics using Stata*. Texas: Stata Press.
- Central Intelligence Agency. (2011). The World Factbook, from Retrieved from [https://www.cia.gov/library/publications/the-world-factbook/wfbExt/region\\_eas.html](https://www.cia.gov/library/publications/the-world-factbook/wfbExt/region_eas.html)
- Chan, W. M., & Devi, S. S. (2009). Malaysia's dividend rule: A blot on corporate governance. *Accountants today*, Sept, 26-29.
- Chang, S.-K. (2011). A computationally practical simulation estimation of dynamic panel tobit models. *Academia Economic Papers*, 39(1), 1-32.
- Chang, S. J. (2003). Ownership structure, expropriation, and performance of group-affiliated companies in Korea. *The Academy of Management Review*, 46(2), 238-253.
- Chatterjee, S., Hadi, A. S., & Price, B. (2000). *Regression analysis by example* (3rd ed.). New York: John Wiley & Sons.
- Chaw, W. M., & Susela, S. D. (2009). Malaysia's dividend rule: A blot in corporate governance? *Accountants Today*, September 26-29.
- Chen, Y. Y., & Young, M. N. (2009). Cross-border mergers and acquisitions by Chinese listed companies: A principal-principal perspective. *Asia Pacific Journal of Management*, 10.1007/s10490-009-9150-. doi: 10.1007/s10490-00909150-7
- Chen, Y. Y., & Young, M. N. (2010). Cross-border mergers and acquisitions by Chinese listed companies: A principal-principal perspective. *Asia Pacific Journal of Management*. doi: 10.1007/s10490-009-9150-7
- Chidambaran, N. K., & John, K. (1998). *Relationship investing: Large shareholder monitoring with managerial cooperation*. NYU Working Paper No. FIN-98-044. New York University. New York. Retrieved from [Retrieved from SSRN website: http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1297123](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1297123)
- Chiou, J.-R., Chen, Y.-R., & Huang, T.-C. (2010). Assets appropriation via cash dividends? Free cash flow or tunneling? *China Journal of Accounting Research*, 3(1), 71-93.
- Chong, P. K., & Porter, B. (2010). Malaysia Leads Asian Mergers Rebound After Easing Takeover, Property Rules. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/2010-12-01/malaysia-leads-asian-m-a-rebound-as-najib-eases-takeover-rules.html>
- Chow, G. C. (1960). Tests of equality between sets of coefficients in two linear regressions. *Econometrica*, 28,, 591-605.
- Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the Agency Costs of Family and Non-Family Firms: Conceptual Issues and Exploratory Evidence. *Entrepreneurship: Theory & Practice*, 28(4), 335-354. doi: 10.1111/j.1540-6520.2004.00049.x
- Chu, E. Y. C., & Cheah, K. G. (2004). *The determinants of ownership structure in Malaysia*. Paper presented at the Fourth Asia Pacific Interdisciplinary Research in Accounting Conference, Singapore.

- Chung, K. H., & Pruitt, S. W. (1994). A simple approximation of Tobin's q. *Financial Management*, 23(3), 70-74.
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (1999). *Corporate diversification in East Asia: The role of ultimate ownership structure and group affiliation*. Policy Research Working Paper 2089. World Bank Washington, D.C. Retrieved from SSRN website: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=615021](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=615021)
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*(6), 2741-2771.
- Claessens, S., Djankov, S., Joseph, P. H. F., & Lang, L. H. P. (1999). *Expropriation of minority shareholders: evidence from East Asia*. Policy Research Paper 2088. Washington DC. World Bank. Retrieved from <http://www-wds.worldbank.org>
- Claessens, S., Djankov, S., & Lang, L. (1999a). Who controls East Asian corporations - and the implications for legal reforms *Public Policy for the Private Sector* (Vol. 195, pp. 1-8): The World Bank Group.
- Claessens, S., Djankov, S., & Lang, L. H. P. (1999b). *Who controls East Asian corporations - and the implications for legal reforms*. Public Policy for the Private Sector 195
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000a). *East Asian corporations: heroes or villains*. World Bank discussion paper 409. Retrieved from <http://www1.worldbank.org/finance/assets/images/discpaper409.pdf>
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000b). The separation of ownership and control in East Asian Corporations. *Journal of Financial Economics*, 58, 81-112.
- Claessens, S., & Fan, J. P. H. (2002). Corporate governance in Asia: A survey. *International Review of Finance*, 3(2), 71-103.
- Collins, M. C., Dutta, A. S., & Wansley, J. W. (2009). Managerial ownership and dividend policy in the U.S. Banking Industry. *Journal of Business & Economics Research*, 7(10), 33-38.
- Company Act, Laws of Malaysia, Act 125 Stat. 450 (1965).
- Cong, W., & Xie, F. (2009). Corporate governance transfer and synergistic gains from mergers and acquisitions. *The Review of Financial Studies*, 22(2), 829-858. doi: 10.1093/rfs/hhn018
- The Corporation Code of the Philippines, 68 68 (1980 1980).
- Croci, E., & Petmezas, D. (2010). Minority shareholders' wealth effects and stock market development: Evidence from increase-in-ownership M&As. *Journal of Banking & Finance*, 34, 681-694. doi: 10.1016/j.bankfin.2009.09.003
- Cronqvist, H., & Nilsson, M. (2003). Agency costs of controlling minority shareholders. *The Journal of Financial and Quantitative Analysis*, 38(4), 695-719.
- Crutchley, C. E., Jensen, M. R. H., Jahera, J. S., & Raymond, J. E. (1999). Agency problems and the simultaneity of financial decision making: The role of institutional ownership. *International Review of Financial Analysis*, 8(2), 177-197.
- Cubbin, J., & Leech, D. (1983). The effect of shareholder dispersion on the degree of control in British companies: Theory and measurement. *Economic Journal*, 93, 11-55.

- Cummins, J. G., Hassett, K. A., & Hubbard, R. G. (1996). Tax reforms and investment: A cross-country comparison. *Journal of Public Economics*, 62(1-2), 237-273. doi: 10.1016/0047-2727(96)01580-0
- Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics*, 87, 73-100. doi: 10.1016/j.jfineco.2006.10.005
- Davidson, R., & MacKinnon, J. G. (1993). *Estimation and inference in econometrics*. New York, NY: Oxford University Press.
- Davis, G. F. (1991). Agents without Principles? The spread of the poison pill through the intercorporate network. *Administrative Science Quarterly*, 36(4), 583-613.
- de Grassa, T., & Masson, R. (2012). More power to you: properties of a more powerful event study methodology. *Review of Accounting and Finance*, 11(2), 166-183. doi: 10.1108/14757701211228200
- DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2004). *Dividend policy, agency costs, and earned equity*. Working Paper No. 10599. University of Southern California. Retrieved from <http://www.nber.org/papers/w10599>
- Demsetz, H. (1983). The structure of ownership and the theory of the firm. *Journal of Law and Economics*, 26, 375-390.
- Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy*, 93, 1155-1177.
- Denis, D. J., & Osobov, I. (2008). Why do firms pay dividends? International evidence on the determinants of dividend policy. *Journal of Financial Economics*, 89(1), 62-82. doi: 10.1016/j.jfineco.2007.06.006
- Deshmukh, S. (2003). Dividend Initiations and Asymmetric Information: A Hazard Model. *Financial Review*, 38(3), 351-368. doi: 10.1111/1540-6288.00050
- Dharwadkar, R., George, G., & Brandes, P. (2000). Privatization in emerging economies: An agency theory perspective. *The Academy of Management Review*, 25(3), 650-669.
- Dhnadirek, R., & Tang, J. (2003). Corporate governance problems in Thailand: Is ownership concentration the cause? *Asia Pacific Business Review*, 10(2), 121-138. doi: 10.1080/13602380410001677173
- Dhrymes, P., & Kurz, M. (1967). Investment, dividends and external finance behavior of firms. In R. Ferber (Ed.), *Determinants of Investment Behavior* (pp. 427-486). New York: UMI.
- Dickerson, A. P., Gibson, H. D., & Tsakalotos, E. (1998). Takeover risk and dividend strategy: A study of UK firms. *The Journal of Industrial Economics*, 46(3), 281-300.
- Doukas, J. A., Kim, C., & Pantzalis, C. (2000). Security Analysis, agency costs, and company characteristics. *Financial Analysts Journal*, 56(6), 54-63.
- Douma, S., George, R., & Kabir, R. (2006). Foreign and domestic ownership, business groups, and firm performance: Evidence from a large emerging market. *Strategic Management Journal* 27(7), 637-657.
- Drukker, D. M. (2003). Testing for serial correlation in linear panel-data models. *The Stata Journal* 3(2), 168-177.
- Dyck, A., & Zingales, L. (2004). Private benefits of control: An international comparison. *The Journal of Finance*, 59(2), 537-599.
- Easterbrook, F. H. (1984). Two agency-cost explanations of dividends. *The American Economic Review*, 74(4), 650-659.

- Erickson, M., & Wang, S.-w. (1999). Earnings management by acquiring firms in stock for stock mergers. *Journal of Accounting and Finance*, 27, 149-176.
- Faccio, M., & Lang, L. H. P. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics*, 65(3), 365-395.
- Faccio, M., Lang, L. H. P., & Young, L. (2001a). *Debt and expropriation*. Paper presented at the 2001 Meetings of the Association of Financial Economics, New Orleans.
- Faccio, M., Lang, L. H. P., & Young, L. (2001b). Dividends and expropriation. *American Economic Review Papers* 91, 54-78.
- Faccio, M., & Masulis, R. W. (2005). The choice of payment method in European mergers and acquisitions. *The Journal of Finance*, 60(3), 1345-1388.
- Faccio, M., & Stolin, D. (2006). Expropriation vs. proportional sharing in corporate acquisitions. *Journal of Business*, 79(3), 1413-1444.
- Fama, E. F. (1974). The empirical relationships between the dividend and investment decisions of firms. *American Economic Review*, 64(3), 304-318.
- Fama, E. F., & Babiak, H. (1968). Dividend policy: An empirical analysis. *Journal of the American Statistical Association*, 63(324), 1132-1161.
- Fama, E. F., & French, K. (2001). Disappearing dividends: Changing firm characteristics or lower propensity to pay. *Journal of Financial Economics*, 60(15), 1-33.
- Fama, E. F., & French, K. R. (2011). 17 Industry Portfolios, 2011, from [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html)
- Fama, E. F., & Jensen, M. (1983). Separation of ownership and control. *Journal of Law and Economics*, 26, 301-326.
- Fama, E. H., & French, K. R. (2002). Testing trade-off and pecking order predictions about dividends and debt. *Journal of Financial Studies*, 15, 1-33.
- Firth, M. (1991). Corporate takeovers, stockholder returns and executive rewards. *Managerial and Decision Economics*, 12(6), 421-428. doi: 10.1002/mde.4090120603
- Frankfurter, G. M., & Wood Jr, B. G. (2002). Dividend policy theories and their empirical tests. *International Review of Financial Analysis*, 11(2), 111-138. doi: 10.1016/s1057-5219(02)00071-6
- Ghosh, A., & Jain, P. C. (2000). Financial leverage associated with corporate mergers. *Journal of Corporate Finance*, 377-402. doi: 10.1016/S0929-1199(00)00007-9
- Giannetti, M., & Simonov, A. (2006). Which investors fear expropriation? Evidence from investors' portfolio choices. *The Journal of Finance*, LXI(3), 1507-1547.
- Gomez-Mejia, L., Wiseman, R. M., & Dykes, B. J. (2005). Agency problems in diverse contexts: A global perspective. *Journal of Management Studies*, 42(7), 1507-1517. doi: 10.1111/j.1467-6486.2005.00554x
- Gordon, M. J. (1959). Dividends, earnings, and stock prices. *The Review of Economic and Statistics*, 41(2 (Part 1)), 99-105.
- Gordon, M.J. and Shapiro, E. (1956), Capital equipment analysis: the required rate of profit, *Management Science*, 3,102-10.
- Green, W. (1993). *Econometric analysis*. New York, NY: Macmillan Publishing Company.

- Greene, W. H. (2010). *Fixed effects vector decomposition: A magical solution to the problem of time invariant variables in fixed effect models?* Retrieved from <http://pages.stern.nyu.edu/~wgreene>
- Grossman, S., & Hart, O. (1980). Takeover bids, the free-rider problem, and the theory of the corporation. *Bell Journal of Economics*, *11*, 42-64.
- Grossman, S. J., & Hart, O. D. (1988). One share-one vote and the market for corporate control. *Journal of Financial Economics*, *20*, 175-202. doi: 10.1016/0304-405X(88)90044-X
- Grullon, G., Michaely, R., & Swaminathan, B. (2002). Are dividend changes a sign of firm maturity. *Journal of Business*, *75*, 387-424.
- Guan, C. K. (2005). Corporate governance reforms in Malaysia: Issues and challenges *Reforming corporate governance in Southeast Asia*. Singapore: Institute of Southeast Asian Studies.
- Gugler, K., & Yurtoglu, B. B. (2003). Corporate governance and dividend pay-out policy in Germany. *European Economic Review*, *47*(4), 731-758. doi: 10.1016/S0014-2921(02)00291-X
- Hadiputranto Hadinoto & Partners. (2005). Guide to mergers and acquisitions:Indonesia. Swiss: Baker & McKenzie.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2005). *Multivariate data analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Haleblian, J., & Finkelstein, S. (1999). The influence of organizational acquisition experience on acquisition performance: A behavioral learning perspective. *Administrative Science Quarterly*, *44*(1), 29-56.
- Hamilton, L. C. (2009). *Statistics with Stata: Updated for version 10*. Belmont, CA: Brooks/Cole Cengage Learning.
- Hansen, L. (1982). Large sample properties of generalized method of moments estimators. *Econometrica* *50*(3), 1029-1054.
- Hardin, J. (1996). *Estimation commands and omitted variables*. Retrieved from StataCorp LP <http://www.stata.com/support/faqs/statistics/estimation-commands-and-omitted-variables/>
- Harris, M., & Raviv, A. (1988). Corporate governance: Voting rights and majority rules. *Journal of Financial Economics*, *20*, 203-235.
- Harvey, C. R., Lins, K. V., & Roper, A. H. (2004). The effect of capital structure when expected agency costs are extreme. *Journal of Financial Economics*, *74*, 3-30. doi: 10.1016/j.jfince.2003.07.003
- Hausman, J. A., & Taylor, W. E. (1981). Panel data and unobservable individual effects. *Econometrica*, *49*(6), 1377-1398.
- Healy, P., Palepu, K., & Ruback, R. (1992). Does corporate performance improve after mergers? *Journal of Financial Economics*, *31*(2), 135-175. doi: 10.1016/0304-405X(92)90002-F
- Heckman, J. (1979). Sample selection bias as a specification error. *Econometrica*, *47*, 153-161.
- Hermalin, B., & Weisbach, M. (1991). The effects of board composition and direct incentives on firm performance. *Financial Management*, *20*(101-112).
- Himmelberg, C. P., Hubbard, R. G., & Palia, D. (1999). Understanding the determinants of managerial ownership and the link between ownership and performance. *Journal of Financial Economics*, *53*, 353-384.

- Hitt, M. A., Harrison, J. S., & Ireland, R. D. (2001). *Mergers and acquisition: A guide to creating value for stakeholders*. Oxford, London: Oxford University Press, Incorporated.
- Holderness, C. G. (2003). A survey of blockholders and corporate control. *Economic Policy Review*, 9(51-63).
- Holderness, C. G., & Sheehan, D. P. (1988). The role of majority shareholders in publicly held corporations. *Journal of Financial Economics*, 20, 317-346.
- Holmen, M., & Knopf, J. D. (2004). Minority shareholder protections and the private benefits of control for Swedish mergers. *The Journal of Financial and Quantitative Analysis*, 39(1), 167-191.
- Huber, P. J. (1964). Robust estimation of a location parameter. *The Annals of Mathematical Statistics*, 35(1), 73-101.
- Hussainey, K., Mgbame, C.O., & Chijoke-Mgbame, A. M. (2010). Dividend policy and share price volatility. *The Journal of risk finance*, 12(1), 57-68. doi: 10.1108/1526594111110007 57-68
- Ince, O. S., & Porter, R. B. (2006). Individual equity retrun data from Thomson Datastream:Handle with care! *Journal of Financial Research*, 29(4), 463-479.
- Jensen, G. R., Solberg, D. P., & Zorn, T. S. (1992). Simultaneous determination of insider ownership, debt and dividend policies. *The Journal of Financial and Quantitative Analysis*, 27(2), 247-263.
- Jensen, M. (1986, May ). *Agency costs of free cash flow, corporate finance, and takeovers*. Paper presented at the 98th Annual Meeting of the The American Economic Association.
- Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance*, 48, 831-880.
- Jensen, M., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(305-360). doi: 10.1016/0304-405X(76)90026-X
- Jensen, M., & Ruback, R. S. (1983). The market for corporate control : The scientific evidence. *Journal of Financial Economics*, 11(1-4), 5-50. doi: 10.1016/0304-405x(83)90004-1
- Jeon, J. Q., Ligon, J. A., & Soranakom, C. (2010). *Dividend policy and the method of payment in mergers and acquisitions*. Seoul. Retrieved from <http://www.apjfs.org/conference/2010/cafm2010/5-3.pdf>
- Jiang, Y., & Peng, M. W. (2010). Principal-principal conflicts during crisis. *Asia Pacific Journal of Management*. doi: 10.1007/s10490-009-9186-8
- Jirina, Marcel & Jirina, Marcel Jr. (2008). Decomposition of correlation integral to local functions. (Technical Report No. V-1025).Czech Republic: Institute of Computer Science, Academy of Sciences.
- John, K., & Knyazeva, A. (2006). *Payout policy, agency conflicts, and corporate governance*. Retrieved from SSRN:<http://ssrn.com/abstract=841064>
- John, K., & Senbet, L. (1998). Corporate governance and board effectiveness. *Journal of Banking & Finance*, 22, 371-403.
- Johnson, S., Boone, P., Breach, A., & Friedman, E. (2000). Corporate governance in the Asian financial crisis. *Journal of Financial Economics*, 58(1-2), 141-186. doi: 10.1016/S0304-405X(00)00069-6, 141-186.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000). Tunneling. *American Economic Review Papers and Proceedings*, 90.

- Kalay, A., & Michaelley, R. (2000). Dividend and taxes: A re examination. *Financial Management*, 29, 55-75.
- Kamaly, A. (2007). Trends and determinants of mergers and acquisitions in developing countries in the 1990s. *International Research Journal of Finance and Economics*(8), 16-30.
- Kaplan, R., & Norton, D. P. (1996). Using the balanced scorecard as a strategic management system. *Harvard Business Review*, 74(1), 75-85.
- Keane, M. P., & Runkle, D. E. (1992). On the estimation of panel-data models with serial correlation when instruments are not strictly exogenous. *Journal of Business & Economic Statistics*, 10(1), 1-9.
- Khan, F.(2010). How Islamic is Islamic banking? *Journal of Economic Behavior & Organization*, 76(3), 805-820.
- Khan, T. (2006). Company Dividends and Ownership Structure: Evidence from UK Panel Data. *Economic Journal*, 116(510), C172-C189.
- Khanna, T., & Palepu, K. (1997). Why focused strategies may be wrong for emerging markets. *Harvard Business Review*, 77(4), 125-134.
- Kim, M.-K. (2009). *Trends and practices in the global market* (In G. Chand ed.). Tokyo, Japan: Asian Productivity Organization.
- King, D. R., Dalton, D. R., Daily, C. M., & Covin, J. G. (2004). Meta-analyses of post-acquisition performance: Indications of unidentified moderators. *Strategic Management Journal*, 25(2), 187-200. doi: 10.1002/smj.371
- Kramer, M., & Lensink, R. (2012). *The impact of financial advisors on the stock portfolios of retail investors* Paper presented at the European Financial Management Association Barcelona, Spain.
- Kumar, P. (1988). Shareholder-manager conflict and the information content of dividends. *The Review of Financial Studies*, 1(2), 111-136.
- Kwoka, J. E. J. (1985). The Herfindahl Index in theory and practice. *The Antitrust Bulletin*, Summer, 915-947.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1998). Law and finance. *Journal of Political Economy*, 106(6), 1113-1155.
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54, 471-517.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). *Investor protection and corporate valuation*. National Bureau of Economic Research. Cambridge. Retrieved from [www.nber.org/papers/w7403](http://www.nber.org/papers/w7403)
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *The Journal of Finance*, 52(3), 1131-1150.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000a). Agency problems and dividend policies around the world. *The Journal of Finance*, 55(1), 1-33.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (2000b). Investor protection and corporate governance. *Journal of Financial Economics*, 58(1-2), 3-27.
- Lang, E., & Tudor, J. D. (2003). Best websites for financial professionals, business appraisers, and accountant. Hoboken, NJ: John Wiley & Sons
- Lang, L. H. P., & Stulz, R. M. (1994). Tobin's q, corporate diversification, and firm performance. *Journal of Political Economy*, 102(6), 1248-1280.

- Langetieg, T. (1978). An application of a three-factor performance index to measure stockholder gains from merger. *Journal of Financial Economics*, 6, 365-384.
- Law on Limited Liability Company (2007).
- Lee, C. W. J., & Xiao, X. (2002). *Cash dividends and large shareholder expropriation in China*. EFMA 2003 Helsinki Meetings -Working paper. Tsinghua University. Retrieved from Social Science Research Network website: [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=410181](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=410181)
- Leland, H. E., & Pyle, D. H. (1977). Informational asymmetries, financial structure, and financial intermediation. *The Journal of Finance*, 32(2), 371-387.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance and firm value: Evidence from the East Asian financial crisis. *The Journal of Finance*, 58(4), 1445.
- Lins, K. V. (2003). Equity ownership and firm value in emerging markets. *The Journal of Financial and Quantitative Analysis*, 38(1), 159-184.
- Lintner, J. (1956). Distribution of incomes of corporations among dividends, retained earnings, and taxes. *The American Economic Review*, 46(2), 97-113.
- Lintner, J. (1962). Dividends, earnings, leverage, stock prices, and the supply of capital to corporations. *Review of Economics and Statistics*, August, 243-269.
- Loderer, C., & Martin, K. (1990). Corporate acquisitions by listed firms: The experience of a comprehensive sample. *Financial Management* 19, 17-33.
- Loh, S. C. (Ed.). (1996). *Corporate powers: Controls, remedies and decision-making*. Kuala Lumpur, Malaysia: Malayan Law Journal Sdn Bhd.
- Lopez, L. (2000). United Engineers Malaysia proposes to swap stock for Renong Holdings. *Wall Street Journal*. Retrieved from <http://courses.wcupa.edu/rbove/eco343/013Compecon/Tigers/Malaysia/001022Renong.txt>
- Louis, H. (2004). Earnings management and the market performance of acquiring firms. *Journal of Financial Economics*, 74, 121-148.
- Luo, Y. (2005). Do insiders learn from outsiders? Evidence from mergers and acquisitions. *The Journal of Finance*, 60(4), 951-982.
- Madalla, G. S. (2001). *Introduction to Econometrics*. New York: Wiley.
- Mancinelli, L., & Ozkan, A. (2006). Ownership structure and dividend policy: Evidence from Italian firms. *European Journal of Finance*, 12(3), 265-282.
- Manne, H. G. (1965). Mergers and the market for corporate control. *Journal of the Political Economy*, 73, 110-120.
- Marsh, T., & Merton, R. (1987). Dividend behaviour for the aggregate stock market. *Journal of Business*, 60, 1-40. doi: <http://www.jstor.org/stable/2352945>
- Martin, K. J. (1996). The method of payment in corporate acquisitions, investment opportunities, and management ownership. *The Journal of Finance*, 51(4), 1227-1246.
- Martynova, M., & Renneboog, L. (2009). What determines the financing decision in corporate takeovers: Cost of capital, agency problems, or the means of payment? *Journal of Corporate Finance*, 15(3), 290-315. doi: 10.1016/j.jcorpfin.2008.12.004

- Mat Nor, F., & Mohd Zin, A. R. (1996). *Malaysian Mergers and Acquisitions: Theory and selected cases*. Petaling Jaya, Malaysia: U-Text.
- Maury, B. (2004). *Essays on the costs and benefits of large shareholders in corporate governance*. Swedish School of Economics and Business Administration, Helsinki, Finland.
- Maury, C., & Pajuste, A. (2002). Controlling shareholders, agency problems, and dividend policy in Finland. *The Finnish Journal of Business Economics*(1), 15-45.
- McPherson, M. Q., & Trumbull, W. N. (2008). Rescuing observed fixed effects: Using the Hausman-Taylor method for out-of-sample trade projections. *The International Trade Journal*, 22(3), 315-340. doi: 10.1080/088539008021913890885-3908
- Metwalli, A. M., & Tang, R. Y. W. (2002). Southeast Asia: The next M&A hotspot? *The Journal of Corporate Accounting and Finance, Jan/Feb*, 39-47. doi: 10.1002/jcaf.20466
- Metwalli, A. M., & Tang, R. Y. W. (2009). Update: M&A in Southeast Asia. *The Journal of Corporate Accounting & Finance*(January/February ), 51-60. doi: 10.1002/jcaf.20466
- Michel, A. (1979). Industry influence on dividend policy. *Financial Management*, 8(3), 22-26.
- Miller, M. H., & Modigliani, F. (1961). Dividend Policy, Growth, and the Valuation of Shares. *The Journal of Business*, 34(4), 411-433.
- Miller, M. H., & Rock, K. (1985). Dividend policy under asymmetric information *Journal of Finance*, 40, 1031-1051.
- Mitton, T. (2002). A cross-firm analysis of the impact of corporate governance on the East Asian financial crisis. *Journal of Financial Economics*, 64(2), 215-241. doi: 10.1016/S0304-405X(02)00076-4
- Modigliani, F. (1982), Debt, dividend policy, inflation and market valuation. *The Journal of Finance*, 37, 225-75.
- Moeller, S. B., Schlingemann, F. P., & Stulz, R. M. (2004). Firm size and the gains from acquisitions. *Journal of Financial Economics*, 73, 201-228. doi: 10.1016/j.jfineo.2003.07.002
- Moh'd, M. A., Perry, L. L., & Rimbey, J. N. (1995). An investigation of the dynamic relationship between agency. *The Financial Review*, 30(2), 367.
- Monetary Authority Singapore. from <https://secure.mas.gov.sg/msb-xml/Report.aspx?tableSetID=III&tableID=III.8>
- Morck, R., Stangeland, D., & Yeung, B. (1998). *Inherited wealth, corporate control and economic growth: The Canadian disease*. NBER working paper 6814. National Bureau of Economic Research. Cambridge, MA. Retrieved from <http://www.nber.org/papers/w6814>
- Mueller, D. C. (1969). A theory of conglomerate mergers. *The Quarterly Journal of Economics*, 83(4), 643-659.
- Mukherjee, C., White, H., & Wuyts, M. (1998). *Econometrics and data analysis for developing countries*. London, United Kingdom: Routledge.
- Myers, S. C. (1977). Determinants of Corporate Borrowing. *Journal of Financial Economics*, 4, 147-175.
- Myers, S. C. (1990). *Still searching for capital structure*. Paper presented at the HEC International Conference.

- Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics*, 13, 187-221.
- Myron J.Gordon (1963), Optimal investment and financing policy. *Journal of Finance*, May, p.264-272.
- Nagar, V., Petroni, K., & Wolfenzon, D. (2002). *Ownership and performance in close corporations: a natural experiment in exogenous ownership structure*. Working paper S-CG-02-06. New York University. Retrieved from <http://archive.nyu.edu/handle/2451/26461>
- Nam, S.-W. (2001). Business groups looted by controlling families, and the Asian crisis. *ADB Institute Research Paper Series*, 27, 1-54.
- Nangseuphim, N. (2010). Amazing Thailand! *Thailand Business News*. Retrieved from <http://thailand-business-news.com/markets/26585-amazing-thailand>
- Officer, M. S. (2003). Termination fees in mergers and acquisitions. *Journal of Financial Economics*, 69(3), 431-467. doi: 10.1016/S0304-405X(03)00119-3
- Palich, L. E., Cardinal, L. B., & Miller, C. C. (2000). Curvilinearity in the diversification-performance linkage: An examination of over three decades of research. *Strategic Management Journal*, 21, 155-174.
- Pickering Pacific Com. (2009). ASEAN 6- M&A Deals. Singapore: Pickering Pacific Pte Ltd.
- Pindado, J., & Chabela, d. I. T. (2006). The role of investment, financing and dividend decisions in explaining corporate ownership structure: Empirical evidence from Spain. *European Financial Management*, 12(5), 661-687.
- Pinkowitz, L. E. E., Stulz, R. E. N., & Williamson, R. (2006). Does the contribution of corporate cash holdings and dividends to firm value depend on governance? A cross-country analysis. *Journal of Finance*, 61(6), 2725-2751.
- Plümper, T., & Troeger, V. E. (2007). Efficient estimation of time-invariant and rarely changing variables in finite sample panel analyses with unit fixed effects *Political Analysis*, 15(2), 124-139. doi: 10.1093/pan/mpm002
- Plümper, T., & Troeger, V. E. (2011). Fixed-effects vector decomposition: Properties, reliability and instruments. *Political Analysis*, 19, 147-164. doi: 10.1093/pan/mpr008
- Princeton DSS Libguides. *Oscar Torres-Reyna*, from <http://dss.princeton.edu/training/TS101.pdf#page=23>
- Public Limited Company Act B.E.2535 (B.E.2535).
- Rahman, R. A., & Limmack, R. J. (2004). Corporate acquisitions and the operating performance of Malaysia companies. *Journal of Business Finance and Accounting*, 31(3-4), 359-400. doi: 10.1111/j.0306-686X.2004.00543
- Rajan, R., & Zingales, L. (1995). What do we know about capital structure? Some evidence from international data. *Journal of Finance*, 50, 1421-1460. doi: 10.1.1.139.4133
- Reddy, K. (2010). *The relationship between corporate governance practices and financial performance in New Zealand: An empirical investigation*. Doctoral dissertation, The University of Waikato, Hamilton, New Zealand. Retrieved from <http://researchcommons.waikato.ac.nz/handle/10289/4367>
- Renneboog, L., & Trojanowski, G. (2007). Control structures and payout policy. *Managerial Finance*, 33(1), 43-64. doi: 10.1108/03074350710715809

- Rosenstein, S., & Wyatt, J. G. (1997). Inside directors, board effectiveness, and shareholder wealth. *Journal of Financial Economics*, 44, 229-250.
- Ross, S. A. (1973). The economic theory of agency: The principal's problem. *The American Economic Review* 63, 134-139.
- Rozeff, M. S. (1982). Growth, beta and agency costs as determinants of dividend payout ratios. *The Journal of Financial Research*, V(3), 249-259.
- Rubin, A., & Smith, D. R. (2009). Institutional ownership, volatility and dividends. *Journal of Banking & Finance*, 33(4), 627-639. doi: 10.1016/j.jbankfin.2008.11.008
- Safieddine, A. (2009). Islamic Financial Institutions and Corporate Governance: New Insights for Agency Theory. *Corporate Governance: An International Review*, 17(2), 142-158.
- Salonga, J. R. (2003). Philippine dividend law revisited: II. *Philippine Law Journal*, 27(206), 867-883.
- Scharfstein, D. (1988). The disciplinary role of takeover. *The Review of Economic Studies*, 55(2), 185-199. doi: 10.2307/2297576
- Schleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Economy*, 94(3), 461-489.
- Schleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The Journal of Finance*, 52(2), 737-783.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, 18, 473-490.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization Science*, 12(2), 99-116.
- Securities Commission Malaysia. (2011). Malaysia's capital market crosses RM2 trillion threshold. Kuala Lumpur: SSC.
- Selvanathan, A., Selvanathan, S., Keller, G., & Warrack, B. (2004). *Australian business statistics* (3rd ed.). Southbank, Victoria: Thomson.
- Setia-Atmaja, L., Tanewski, G. A., & Skully, M. (2009). The role of dividends, debt and board structure in the governance of family controlled firms. *Journal of Business Finance and Accounting*, 36(7), 863-898. doi: 10.1111/j.1468-5957.2009.02151.x
- Shleifer, A., & Vishny, R. W. (1986). Large shareholder and corporate control. *The Journal of Political Economy*, 94(3, Prt 1), 461-488.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance*, 52, 737-783. doi: 10.1111/j.1540-6261.1997.tb04820.x
- Singh, M. and W. N. Davidson III (2003). Agency costs, ownership structure and corporate governance mechanisms. *Journal of Banking & Finance*, 27(5), 793-816.
- Singhai, M. (2002). *Protecting minority shareholders from improper dilution*. Shareholder rights and the equitable treatment of shareholders. The Fourth Asian Roundtable on Corporate Governance. Mumbai, India.
- Sirower, M. (1997). *The synergy Trap: How companies lose the acquisition game*. New York: Free Press.
- Smart, S. B., & Megginson, W. L. (2008). *Introduction to financial management* (Second ed.): Cengage Learning.
- Smirlock, M., & Marshall, W. (1983). An Examination of the empirical relationship between the dividend and investment decisions: A note. *The Journal of Finance*, 38(5), 1659-1667.

- Song, S. I. (2007b). *Effects of ownership structure, motives and premiums paid on bidding firms' performance*. Doctoral dissertation, Universiti Sains Malaysia, Pulau Pinang.
- Song, S. I., & Chu, E. Y. (2011). Corporate take-overs in Malaysia: Value creation or agency conflicts? *International Research Journal of Finance and Economics*(75), 138-156.
- Stief, C. (2010). An overview and history of ASEAN. *Association of Southeast Asian Nations - ASEAN* Retrieved 24 May, 2011, from <http://geography.about.com/od/politicalgeography/a/asean.htm>
- Stulz, R. (1988). Managerial control of voting rights: Financial policies and the market for the political economy. *Journal of Financial Economics*, 20.
- Su, Y., Xu, D., & Phan, P. H. (2008). Principal-principal conflict in the Governance of the Chinese public corporation. *Management and organization review*, 4(1), 17-38. doi: 10.1111/j.740-8784.2007.00090.x
- Subramaniam, R., & Devi, S. S. (2011). Corporate governance and dividend policy in Malaysia. *International Conference on Business Economics Research*, 1, 200-207.
- Sudarsanam, S. (2003). *Creating value from mergers and acquisition: The challenges*. Malaysia: Prentice Hall.
- Suhardiman, R. A., Mohamad Kadri, & Johnson, D. R. (2008). Mergers & acquisitions 2008. *Getting the deal through* Retrieved from <http://id.vlex.com/vid/getting-deal-through-mergers-acquisitions-29350412>
- Thomsen, S. (2005). Conflicts of Interest or Aligned Incentives? Blockholder Ownership, Dividends and Firm Value in the US and the EU. *European Business Organization Law Review (EBOR)*, 6(02), 201-225. doi: doi:10.1017/S1566752905002016
- Tobin, J. (1958). Estimation of relationships for limited dependent variables. *Econometrica*, 26, 24-36.
- Truong, T., & Heaney, R. (2007). Largest shareholder and dividend policy around the world. *The Quarterly Review of Economics and Finance*, 47(5), 667-687. doi: 10.1016/j.qref.2007.09.002
- Truong, T. T. (2007). *Corporate ownership, equity, agency costs and dividend policy: An empirical analysis*. PhD, RMIT University, Melbourne.
- Verbeek, M. (2008). *A guide to modern econometrics* (Third ed.). Great Britain: John Wiley & Sons, Ltd.
- Walter J.E. (1963). Dividend policy: It's influence on the value of the enterprise. *The Journal of Finance*, 18(2),280-291.
- Weisstein, E. W. Least Squares Fitting, from <http://mathworld.wolfram.com/LeastSquaresFitting.html>
- Wellalage, N. H. (2012). *Corporate governance and financial performance of Sri Lankan listed companies 2006 - 2010*. Doctoral dissertation, The University of Waikato, Hamilton, NZ. Retrieved from <http://researchcommons.waikato.ac.nz/handle/10289/6410>
- Weston, J. F., Weston, K. S., & Chung, J. A. S. (1998). *Takeovers, restructuring, and corporate governance* (2 ed.). New Jersey, USA: A Simon & Schuster Company.
- Wild, C., & Seber, G. (1999). *Chance encounters: A first course in data analysis and inference*. New York: John Wiley & Sons.

- Wiwattanakantang, Y. (2001). Controlling shareholders and corporate value: Evidence from Thailand. *Pacific-Basin Finance Journal*, 9, 323-362.
- Wong & Partners. (2005). Guide to mergers and acquisitions: Malaysia. Swiss: Baker & McKenzie.
- Wong, A., & Cheung, K. Y. (2009). The effects of mergers and acquisition announcements on the security prices of bidding firms and target firms in Asia. *International Research Journal of Finance and Economics*, 1(2), 274-283.
- Wooldridge, J. M. (2002). *Introductory Econometrics: A modern approach* (2nd ed.). Mason OH: South-Western College Publishing.
- Wooldridge, J. M. (2007). *Econometric analysis of cross-section and panel data*. Cambridge, MA: MIT Press.
- Yen, T.-Y., & Andre, P. (2007). Ownership structure and operating performance of acquiring firms: The case of English-origin countries. *Journal of Economics and Business*, 59, 380-405. doi: 10.1016/j.jeconbus.2007.04.003
- Yeo, V., Lee, J., Hanrahan, P., Ramsay, I., & Stapledon, G. (2008). *Commercial applications of company law in Singapore* (3rd ed.): CCH Asia Pte Limited.
- Yon, K. H. (1999). The ownership structures of the ethnic Chinese business in the Southeast Asian region. *Global Economic Review: Perspectives on East Asian Economies and Industries*, 28(Ethnic Chinese and Regional Economic Integration), 54-76. doi: 10.1080/12265089908449751
- Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D., & Jiang, Y. (2008). Corporate governance in emerging economies: A review of the principal-principal perspective. *Journal of Management Studies*, 45(1), 196-220. doi: 10.1111/j.1467-6486.2007.00752.x
- Young, M. N., Peng, M. W., Alhstrom, D., & Bruton, G. D. (2003). Principal-principal agency. *Journal of Chinese Management Review*, 6(1), 18-45.
- Zeckhauser, R., & Pound, J. (1990). Are large shareholder effective monitors? An investigation of share ownership and corporate performance. In R. G. Hubbard (Ed.), *Asymmetric information, corporate finance and investment*. Chicago: University of Chicago.

# APPENDICES

## Appendix 1: Country Group Information

### Country Groups Information

#### **World**

Composed of 182 countries: Afghanistan, Republic of, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Australia, Austria, Azerbaijan, Bahamas, The, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Canada, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Democratic Republic of, Congo, Republic of, Costa Rica, Côte d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, Gabon, Gambia, The, Georgia, Germany, Ghana, Greece, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong SAR, Hungary, Iceland, India, Indonesia, Iran, Islamic Republic of, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kazakhstan, Kenya, Kiribati, Korea, Kuwait, Kyrgyz Republic, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Luxembourg, Macedonia, Former Yugoslav Republic of, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Portugal, Qatar, Romania, Russia, Rwanda, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Singapore, Slovak Republic, Slovenia, Solomon Islands, South Africa, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Sweden, Switzerland, Syrian Arab Republic, Taiwan Province of China, Tajikistan, Tanzania, Thailand, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Republic of, Zambia, and Zimbabwe.

#### **Advanced economies**

Composed of 33 countries: Australia, Austria, Belgium, Canada, Cyprus, Czech Republic, Denmark, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Taiwan Province of China, United Kingdom, and United States.

#### **Major advanced economies (G7)**

Composed of 7 countries: Canada, France, Germany, Italy, Japan, United Kingdom, and United States.

#### **Newly industrialized Asian economies**

Composed of 4 countries: Hong Kong SAR, Korea, Singapore, and Taiwan Province of China.

#### **European Union**

Composed of 27 countries: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Romania, and United Kingdom.

#### **Emerging and developing economies**

Composed of 149 countries: Afghanistan, Republic of, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahamas, The, Bahrain, Bangladesh, Barbados, Belarus, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Brunei Darussalam, Bulgaria, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Democratic Republic of, Congo, Republic of, Costa Rica, Côte d'Ivoire, Croatia, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Gabon, Gambia, The, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hungary, India, Indonesia, Iran, Islamic Republic of, Iraq, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyz Republic, Lao People's Democratic Republic, Latvia, Lebanon, Lesotho, Liberia, Libya, Lithuania, Macedonia, Former Yugoslav Republic of, Madagascar, Malawi, Malaysia, Maldives, Mali, Mauritania, Mauritius, Mexico, Moldova, Mongolia, Montenegro, Morocco, Mozambique, Myanmar, Namibia, Nepal, Nicaragua, Niger, Nigeria, Oman, Pakistan, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Poland, Qatar, Romania, Russia, Rwanda, Samoa, São Tomé and Príncipe, Saudi Arabia, Senegal, Serbia, Seychelles, Sierra Leone, Solomon Islands, South Africa, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Democratic Republic of, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Uganda, Ukraine, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Republic of, Zambia, and Zimbabwe.

#### **Commonwealth of Independent States**

Composed of 13 countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Mongolia, Russia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan. Georgia and Mongolia, which are not members of the Commonwealth of Independent States, are included in this group for reasons of geography and similarities in economic structure.

#### **Developing Asia**

Composed of 26 countries: Afghanistan, Republic of, Bangladesh, Bhutan, Brunei Darussalam, Cambodia, China, Fiji, India, Indonesia, Kiribati, Lao People's Democratic Republic, Malaysia, Maldives, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Samoa, Solomon Islands, Sri Lanka, Thailand, Timor-Leste, Democratic Republic of, Tonga, Vanuatu, and Vietnam.

#### **ASEAN-5 (edited by author)**

Composed of 5 countries: Indonesia, Malaysia, Philippines, Thailand, and Singapore.

## Appendix 2: SIC broad categories

SIC Codes	Particular
1	Food
2	Mining and minerals
3	Oil and petroleum products
4	Textiles, apparel and footwear
5	Consumer durables
6	Chemicals
7	Drugs, soaps, perfumes and tobacco
8	Construction and construction materials
9	Steel works etc
10	Fabricated products
11	Machinery and business equipment
12	Automobiles
13	Transportation
15	Retail stores
17	Other such (supplies and wholesale services)

Source: Fama, E. H., & French, K. R. 17 Industry Portfolios, 2011

## Appendix 3: Descriptive statistics of variables in each Asean 5 countries

Variable	Obs	Mean	Std. Dev.	Min	Max
<b>Dividend/cash flow</b>					
Indonesia	6282	0.508365	6.185002	-168.229	168.6935
Malaysia	6282	8.827201	24.17898	-206.16	357.5879
Philippines	6282	0.146371	2.302119	0	102.3523
Singapore	6282	6.358132	23.93052	-205.035	417.2047
Thailand	6282	1.526603	9.121734	-63.8437	257.9473
<b>Dividend/Earnings</b>					
Indonesia	6362	0.003104	0.033507	0	0.8
Malaysia	6362	0.068477	0.39233	-13.07	10.84
Philippines	6362	0.003123	0.11224	0	7.17
Singapore	6362	0.056888	0.401163	-10.76	13.02
Thailand	6362	0.013361	0.204462	-10.99	6.65
<b>Dividend/Sales</b>					
Indonesia	6398	0.000894	0.009182	0	0.2423
Malaysia	6398	0.015068	0.050113	0	1.4279
Philippines	6398	0.000652	0.017366	0	0.9741
Singapore	6398	0.016012	0.312077	0	19.2195
Thailand	6398	0.003139	0.027392	0	0.9692
<b>Dividend/Market Capitalisation</b>					
Indonesia	6411	0.000721	0.01272	0	0.9094
Malaysia	6411	0.01181	0.028735	0	1.0728
Philippines	6411	0.000507	0.015015	0	0.9962
Singapore	6411	0.009244	0.038164	0	1.1274
Thailand	6411	0.002309	0.013894	0	0.2569
<b>Efficiency Ratio</b>					

Indonesia	6401	0.023235	0.180124	0	2.615
Malaysia	6401	0.445479	0.560927	0	7.9218
Philippines	6401	0.014162	0.150218	0	3.6598
Singapore	6401	0.321894	0.681615	0	13.6845
Thailand	6401	0.065864	0.292039	0	4.4987
<b>Large Shareholder</b>					
Indonesia	2736	0.999222	7.121295	0	87.31
Malaysia	2736	16.84641	19.10873	0	79
Philippines	2736	0.67807	5.924586	0	81.28
Singapore	2736	11.67393	20.69237	0	87.7
Thailand	2736	1.783542	8.065627	0	79.74
<b>Tobin's q</b>					
Indonesia	6131	0.0372655	0.3421102	0	10.94552
Malaysia	6131	0.5318714	0.8197946	0	10.61276
Philippines	6131	0.0142451	0.1343376	0	2.949276
Singapore	6131	0.3149597	0.7520296	-0.0611865	10.61555
Thailand	6131	0.0651183	0.3215589	0	9.461576
<b>Value of Transactions</b>					
Indonesia	63	0.277023	1.391169	1.9604132	2.6967433
Malaysia	1,785	0.7685628	1.6629738	0.9996553	3.0413927
Philippines	54	0.3010703	0.9026742	1.4492667	2.2289134
Singapore	939	0.8843677	1.8385792	1.3944328	3.16396
Thailand	198	0.4003027	1.5769847	1.5863682	3.0384711

## Appendix 4: Analysis using kruskal-wallis for one-way analysis of variance

```

krallis    cf, by (year)                . kwallis  earnasset, by (year)

Kruskal-Wallis      equality-of-        Kruskal-Wallis      equality-of-
populations rank test                    populations rank test

+-----+
year  Obs  Rank Sum
-----+-----+
-3   821  2.28e+06
-2   913  4.55e+06
-1   958  2.82e+06
0    975  2.90e+06
1    970  2.89e+06
-----+-----+
2    959  2.95e+06
3    921  2.85e+06
+-----+

chi-squared =      903.760 with 6
d.f.
probability =      0.0001

chi-squared with ties =  903.760
with 6 d.f.
probability =      0.0001

. kwallis  mcap, by (year)

Kruskal-Wallis      equality-of-        Kruskal-Wallis      equality-of-
populations rank test                    populations rank test

+-----+
year  Obs  Rank Sum
-----+-----+
-3   736  2.37e+06
-2   536  143916.00
-1   911  3.01e+06
0    971  3.17e+06
1    968  3.13e+06
-----+-----+
2    957  3.14e+06
3    936  3.12e+06
+-----+

chi-squared =     1467.021 with 6
d.f.
probability =      0.0001

chi-squared with ties =  1467.021
with 6 d.f.
probability =      0.0001

+-----+
year  Obs  Rank Sum
-----+-----+
-3   787  2.41e+06
-2   818  2.16e+06
-1   947  2.91e+06
0    966  3.10e+06
1    962  3.17e+06
-----+-----+
2    948  3.21e+06
3    923  3.21e+06
+-----+

chi-squared =      116.451 with 6
d.f.
probability =      0.0001

chi-squared with ties =  116.451
with 6 d.f.
probability =      0.0001

. kwallis  ta, by (year)

Kruskal-Wallis      equality-of-        Kruskal-Wallis      equality-of-
populations rank test                    populations rank test

+-----+
year  Obs  Rank Sum
-----+-----+
-3   792  2.73e+06
-2   871  380627.00
-1   932  3.25e+06
0    953  3.45e+06
1    967  3.56e+06
-----+-----+
2    964  3.61e+06
3    938  3.60e+06
+-----+

chi-squared =     2285.642 with 6
d.f.
probability =      0.0001

chi-squared with ties =  2285.642
with 6 d.f.
probability =      0.0001

```

Appendix 5: Hausman-Taylor results for the country and industry dummy  
variables  
used in Table 14 (PP conflicts and large shareholders)

	1	2	3	4	5	6
	Dividend to cashflows		Dividend to EBITDA		Dividend to Mktcap	
acquiornation ==Indonesia	-37.7186 (0.78)	-62.0185 (1.47)	-1.2728 (1.45)	-1.1620 (1.19)	-0.1474 (1.80)	-0.1646 (1.81)
acquiornation ==Malaysia	52.4183 (2.13)**	46.7534 (2.45)**	0.4327 (2.11)**	0.7714 (1.90)**	0.0436 (1.17)	0.0504 (1.21)
acquiornation ==Philippines	-11.2855 (0.72)	-13.287 (0.66)	0.3932 (1.18)	-13.28752 (0.66)	0.0238 (0.27)	0.0525 (0.48)
acquiornation ==Singapore	39.1372 (1.84)**	29.6986 (1.68)*	-0.0510 (0.27)	0.1898 (0.50)	-0.0005 (0.01)	-0.0003 (0.01)
acquiornation ==Thailand	40.9242 (1.66)*	35.6869 (1.74)*	0.0057 (0.01)	0.5388 (1.25)	0.0368 (0.92)	0.0417 (0.93)
Food		-11.5947 (1.64)*		-0.3166 (2.30)*		-0.0433 (2.69)***
Mines		81.0359 (2.29)*		0.7404 (0.98)		0.0609 (0.76)
Oil		-4.4664 (0.39)		-0.7184 (1.18)		-0.0089 (0.34)
Clothes		-19.5836 (1.70)*		-0.6266 (2.75)***		-0.0447 (1.73)*
Consumer durables		-4.0134 (0.50)		-0.0892 (0.53)		-0.0011 (0.06)
Chemicals		-9.0967 (1.05)		-0.3261 (1.77)		-0.0345 (1.77)
Consumer: drugs, soaps, perfumes, tobacco		-7.6134 (0.71)		-0.1384 (0.62)		-0.0226 (0.95)
Construction and construction materials		-0.3852 (0.06)		-0.1805 (1.42)		-0.0166 (1.17)
Steel works		-12.4834 (1.50)		-0.3763 (2.25)*		-0.0143 (0.76)
Fabricated products		-6.1105 (0.35)		-0.3290 (0.92)		-0.0285 (0.74)
Machinery and business equipment		-6.1178 (0.82)		-0.1039 (0.74)		-0.0145 (0.86)
Automobiles		-10.5421 (1.16)		-0.1815 (0.99)		-0.0177 (0.88)
Transportation		-19.0120 (2.30)**		-0.4682 (2.95)**		-0.0488 (2.56)**
Retail stores		-28.7935 (2.22)**		-0.4476 (1.80)*		-0.0594 (2.01)**
Other supplies		18.1356 (0.41)		1.0181 (0.49)		0.0972 (0.56)

Absolute value of z statistics in parentheses (\* significant at 10%, \*\* significant at 5%; \*\*\* significant at 1%)

## Appendix 6: Regression analysis to check collinearity for country dummy variables

Variable	reg1	reg5
Divcflow	-0.0003	0.0003
dividendeb~a	0.0018	0.0018
dividendeb~a	-0.0003	0.0003
dividendeb~a	0.0016	0.0016
dividendesa~s	0.0004	-0.0004
dividendesa~s	0.0020	0.0020
dividendmcap	-0.0162	0.0162
dividendmcap	0.0174	0.0174
tdta	-0.0001	0.0001
tdta	0.0000	0.0000
Lnta	-0.0000	0.0000
Lnta	0.0000	0.0000
lgcf	0.0005	-0.0005
lgcf	0.0004	0.0004
beta	-0.0002	0.0002
beta	0.0009	0.0009
saleslyrgrth	-0.0000	0.0000
saleslyrgrth	0.0000	0.0000
lgage	0.0004	-0.0004
lgage	0.0010	0.0010
LDivCFlow_1	-0.0002	0.0002
LDivCFlow_1	0.0008	0.0008
AcqNat2	-0.0515***	-0.9485***
AcqNat2	(0.0041)	(0.0041)
AcqNat3	-0.0515***	-0.9485***
AcqNat3	(0.0069)	(0.0069)
AcqNat4	-0.0517***	-0.9483***
AcqNat4	(0.0042)	(0.0042)
_cons	0.0452***	0.9548***
_cons	(0.0081)	(0.0081)
_cons	0.0452	0.9548
_cons	0.0081	0.0081
N	3140	3140
r2	0.0529	0.9481
F	12.4622**	4081.7195**

legend: b/se

Appendix 7: HT for PP conflicts and tax-rate

	(1)	(2)	(3)	(4)
	CDCF	Dividend/EBITDA	Dividend/Sales	Dividend/Mcap
Lship	1.653674	0.103789	0.006667	0.007966
	(2.64)**	(3.50)**	(1.78)	(2.89)**
LagDivCFlow	1.159630			
	(0.40)			
LDivEbitda_1		-0.463315		
		(8.65)**		
LDivSales_1			0.176117	
			(1.84)	
ldivmcap				-0.320492
				(6.17)**
Profitability	-0.000000	-0.142283	-0.000000	-0.000000
	(0.89)	(1.40)	(1.33)	(0.80)
Lag_prof	0.000000	0.087173	-0.000000	-0.000000
	(0.83)	(0.57)	(0.72)	(0.15)
TDTA	-0.083921	0.010700	0.000145	0.001040
	(0.53)	(2.51)*	(0.17)	(2.50)*
lnTotalAssets	-0.054970	-0.020254	0.002926	0.000043
	(0.26)	(2.05)*	(2.10)*	(0.06)
Sales1YrGrth	-0.008446	-0.001313	-0.000034	-0.000050
	(0.22)	(1.33)	(0.47)	(0.53)
Beta	6.547903	0.426321		0.028186
	(1.62)	(2.13)*		(1.50)
TaxRate	0.001149	0.000020	-0.000065	-0.000019
	(0.06)	(0.04)	(0.71)	(0.47)
lgage	8.627462	-0.018686	-0.002210	0.006819
	(2.54)*	(0.12)	(0.16)	(0.47)
dY0	2.057746	0.208956	0.005580	0.011504
	(0.67)	(1.47)	(0.40)	(1.94)
lgValTrans	-0.097889	-0.039339	0.003305	-0.000439
	(0.08)	(0.70)	(0.70)	(0.08)
paymmdummy== 1.0000	38.314210	1.607343	0.181196	0.130614
	(1.74)	(1.46)	(1.90)	(1.32)
paymmdummy== 2.0000	13.179653	0.752035	0.083229	0.071086
	(1.09)	(1.30)	(1.72)	(1.40)
paymmdummy== 3.0000	8.783543	0.392236	0.056771	0.049827
	(0.73)	(0.68)	(1.19)	(0.98)
relateddumm== 1.0000	-1.910964	0.335829	0.022502	0.007375
	(0.24)	(0.86)	(0.72)	(0.20)
Ordinalform	-0.012022	-0.005294	0.000100	-0.000353
	(0.10)	(0.85)	(0.21)	(0.61)
LDivEbitda_1		-0.463315		
		(8.65)**		
Constant	-70.488361	-4.030205	-0.609159	-0.309216
	(2.35)*	(3.01)**	(3.33)**	(2.13)*
Observations	575	592	688	580
Number of IDCODE	257	262	312	257
Absolute value of z statistics in parentheses* significant at 5%; ** significant at 1%				

Appendix 8: PP conflicts and large shareholder square using Tobit regression

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	divcflow lship	divcflow lship	divcflow lship	divcflow lship	divearnDum lship	divearnDum lship	divearnDum lship	divearnDum lship	divMCapDum lship	divMCapDum lship	divMCapDum lship	divMCapDum lship
Lship	0.293831 (1.51)	0.183650 (1.77)	0.184543 (1.81)	0.223100 (1.56)	0.228633 (1.37)	0.196950 (1.12)	0.212391 (1.06)	0.181828 (1.27)	0.321464 (1.21)	0.086870 (1.91)	0.084553 (1.92)	0.085105 (1.94)
<b>Lshipsquare</b>	<b>-0.002723</b> <b>(1.49)</b>	<b>0.009242</b> <b>(1.73)</b>	<b>0.009311</b> <b>(22.60)**</b>	<b>0.009040</b> <b>(1.53)</b>	<b>-0.002125</b> <b>(1.34)</b>	<b>0.009405</b> <b>(1.09)</b>	<b>0.009453</b> <b>(22.93)**</b>	<b>0.009157</b> <b>(22.45)**</b>	<b>-0.003096</b> <b>(1.19)</b>	<b>-0.000774</b> <b>(1.78)</b>	<b>0.009648</b> <b>(1.76)</b>	<b>-0.000743</b> <b>(24.08)**</b>
lgcf	-0.054158 (0.46)	0.317884 (0.90)	0.017951 (0.82)	0.072207 (0.89)	0.009949 (1.98)*	0.524137 (0.25)	0.490666 (1.19)	0.133643 (1.70)	0.527552 (2.06)*	0.382130 (1.09)	0.355160 (1.01)	0.087667 (2.51)*
TDTA	0.002616 (0.25)	-0.079166 (0.59)	-0.085157 (0.65)	0.013237 (2.59)**	-0.039848 (1.62)	-0.091955 (0.41)	-0.097071 (2.73)**	0.008426 (0.50)	-0.037858 (0.26)	-0.073266 (2.05)*	-0.080415 (2.24)*	-0.084208 (2.35)*
Inta	-0.140478 (1.06)	0.303464 (0.92)	-0.042282 (0.60)	0.161259 (0.49)	-0.099714 (0.93)	-0.041727 (0.48)	0.295970 (0.45)	-0.015586 (0.23)	-0.113055 (0.81)	-0.009486 (0.27)	0.232117 (0.22)	0.139135 (0.42)
Beta	0.282670 (1.02)	0.370768 (2.79)**	-2.440603 (2.82)**	-2.184834 (1.18)	-1.095846 (1.79)	0.413090 (0.95)	-2.387533 (2.78)**	-2.114728 (2.44)*	0.356663 (1.00)	-2.219709 (1.37)	-2.235278 (2.62)**	-1.918710 (1.39)
Sales1YrGrth	0.000545 (0.11)	0.002436 (0.67)	0.009310 (0.49)	0.002037 (0.47)	0.001031 (0.48)	0.004019 (0.21)	0.001535 (0.35)	0.004733 (0.25)	0.003096 (0.22)	0.002565 (0.19)	0.007344 (0.39)	0.002335 (0.21)
lgage	0.288760 (1.05)	-2.199750 (1.26)	-2.288056 (2.44)*	0.391275 (2.19)*	-0.973599 (0.82)	-2.147957 (0.90)	0.408725 (0.86)	-1.951610 (2.09)*	-1.534431 (1.01)	0.139903 (2.69)**	0.134714 (0.96)	-2.499564 (0.87)
LDivCFlow_1	-0.357976 (0.73)	-0.080411 (0.32)	-0.040682 (0.16)	-0.081584 (0.45)								
dY0	0.124435 (0.39)	0.227103 (0.17)	0.144649 (0.56)	0.214385 (0.24)	0.069977 (0.03)	0.075597 (0.07)	-0.032513 (0.02)	0.123026 (0.12)	0.391152 (0.23)	0.114917 (0.86)	-0.013331 (1.04)	-0.316565 (1.21)
lgValTrans		-0.099950 (1.22)	0.611008 (2.09)*	0.831006 (1.26)		-0.114709 (1.89)	0.505173 (1.73)	0.792049 (2.66)**		0.471354 (1.64)	0.438424 (1.52)	0.723521 (2.45)*
PaymentCash		0.689092 (0.74)	0.664591 (0.29)	0.563683 (0.51)		-0.037843 (0.77)	0.127037 (0.03)	0.671362 (0.74)		0.648657 (0.10)	0.638110 (1.37)	0.597797 (0.05)
PaymentShare		0.133482 (0.29)	0.186736 (0.42)	1.730131 (0.74)		0.521605 (0.24)	0.173546 (0.10)	-0.096205 (0.78)		0.141622 (0.16)	0.175735 (0.04)	0.087336 (0.35)
PaymentMixed		0.399096 (0.82)	-1.779158 (1.07)	0.371772 (0.31)		0.410364 (0.50)	-1.954077 (0.78)	0.309756 (0.12)		0.232680 (0.92)	-1.606051 (1.17)	0.536075 (0.66)
Related		0.015381	-0.041747	-0.004848		0.084445	0.035516	0.077958		-0.015031	0.555421	0.366276

		(0.04)	(0.11)	(0.01)		(0.20)	(0.02)	(0.14)		(0.08)	(0.28)	(0.21)
Toehold		-0.000737	0.021401	-0.002085		0.013686	0.017827	-0.000930		0.025392	0.000060	-0.000080
		(0.12)	(0.23)	(0.72)		(0.46)	(0.60)	(0.69)		(0.86)	(1.03)	(1.22)
o. acquirornation==Indonesia			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000
			(.)	(.)			(.)	(.)			(.)	(.)
acquirornation==Malaysia			1.185891	-5.180318			1.329824	-4.633506			-5.036285	0.552934
			(1.25)	(1.33)			(1.36)	(1.06)			(1.31)	(1.31)
acquirornation==Philippines			0.393663	0.743064			-1.216319	0.783604			0.198915	-3.884579
			(0.37)	(0.68)			(0.22)	(0.57)			(0.32)	(0.48)
acquirornation==Singapore			0.979076	0.870275			-4.798215	0.809147			-5.578348	-4.480457
			(1.08)	(0.83)			(1.23)	(0.91)			(1.17)	(1.07)
o. acquirornation==Thailand			0.000000	0.000000			0.000000	0.000000			0.000000	0.000000
			(.)	(.)			(.)	(.)			(.)	(.)
ldivmcap									-2.709877	14.541401	0.015560	0.097223
									(0.51)	(1.30)	(1.34)	(1.32)
Profitability					-0.254829	-0.841298	-0.209558	-0.404284	-1.195927	0.000167	-0.000922	-0.000761
					(0.72)	(0.58)	(0.49)	(1.30)	(1.23)	(0.38)	(0.74)	(0.30)
Lag_profitability					-0.856622	-0.212983	-0.809511	0.050015	-1.195927	-0.048824	14.934222	14.518919
					(0.64)	(0.51)	(0.53)	(0.03)	(1.23)	(0.04)	(0.01)	(0.07)
Industry				Yes				Yes				Yes
								(.)				(.)
Constant	-2.098681	-3.695018	-0.668363	2.407275	-0.230564	-0.636377	-6.186851	-0.183068	-0.322659	-0.653215	-0.657323	31.440780
	(1.02)	(1.79)	(14.24)**	(1.58)	(1.43)	(1.58)	(1.41)	(13.80)**	(17.20)**	(1.81)	(67.49)**	(66.64)**
Dividend/EBITDA					1.530486	1.338028	1.255842	1.495490	0.841238			
					(1.41)	(1.16)	(1.08)	(1.32)	(1.21)			
LDivEbitda_1					0.080231	0.060804	0.016958	-0.089857				
					(0.40)	(0.11)	(0.13)	(0.25)				
Observations	659	396	396	396	669	400	400	400	638	388	388	388
Wald chi	7.3	11.42	11.69	8.98	12.62	10.83	9.54	13.90	6.76	35.32	37.63	40.03
Absolute value of z statistics in parentheses(* significant at 10%; ** significant at 5% and ** significant at 1%)												

Appendix 9: FEVD analysis of PP conflicts (dividend to cashflows)

Dependent Variable: Ratio of dividend to cash flow										
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
LagDivCFlow	4.9134	-0.4612	-0.4637	-0.4654	-0.4612	-0.4639	-0.4657	-1.3598	-1.3686	-1.4024
	(3.27)*	-0.2800	-0.2800	-0.2800	-0.2800	-0.2800	-0.2800	-0.9000	-0.9000	-0.9000
Earnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-1.1700	-1.0300	-1.0200	-1.0000	-1.0300	-1.0200	-1.0000	-1.9500	-1.9300	-1.9100
Learnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.7600	-1.4300	-1.4200	-1.4100	-1.4300	-1.4200	-1.4100	(2.22)*	(2.22)*	(2.20)*
Largest Shareholder	0.2436	0.3623	0.3624	0.3626	0.1579	0.1580	0.1580	0.3963	0.3974	0.3970
	(6.11)*	(7.36)*	(7.02)*	(6.72)*	(2.25)*	(2.24)*	(2.14)*	(8.10)*	(7.80)*	(7.40)*
SecondlargestShareholder					0.0034	0.0034	0.0034			
					(3.95)*	(3.86)*	(3.69)*			
LargestShareholderSquard								0.3490	0.3487	0.3500
								(2.77)*	(2.75)*	(2.69)*
lnCashFlow	-0.4997	2.6568	2.6563	2.6545	2.6569	2.6562	2.6542	2.4001	2.4011	2.3771
	-0.9700	(3.99)*	(3.97)*	(3.78)*	(3.98)*	(3.96)*	(3.75)*	(3.64)*	(3.63)*	(3.40)*
TDTA	-0.1326	-0.0118	-0.0119	-0.0117	-0.0118	-0.0119	-0.0117	0.0017	0.0015	0.0025
	(3.61)*	-0.2600	-0.2600	-0.2500	-0.2600	-0.2600	-0.2500	-0.0400	-0.0400	-0.0600
Beta	-0.5070	-0.0145	-0.0112	-0.0119	-0.0145	-0.0111	-0.0116	0.0773	0.0939	0.1003
	-0.5500	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0600	-0.0800	-0.0800
lnTotalAssets	0.0403	0.1042	0.1041	0.1037	0.1042	0.1040	0.1036	0.1304	0.1302	0.1272
	-0.3500	-0.6400	-0.6400	-0.6200	-0.6400	-0.6400	-0.6200	-0.8300	-0.8300	-0.7900
Sales1YrGrth	0.0000	-0.0537	-0.0537	-0.0535	-0.0537	-0.0537	-0.0535	-0.0603	-0.0604	-0.0602
	-0.4600	(2.43)*	(2.42)*	(2.35)*	(2.43)*	(2.42)*	(2.34)*	(2.77)*	(2.76)*	(2.67)*
Age	0.1565	0.0081	0.0081	0.0086	0.0081	0.0081	0.0085	0.0175	0.0173	0.0186
	(3.09)*	-0.1200	-0.1200	-0.1200	-0.1200	-0.1200	-0.1200	-0.2700	-0.2600	-0.2700
dY0		5.9141	5.9140	5.9139	5.9141	5.9140	5.9139	5.1588	5.1562	5.1528
		(2.67)*	(2.67)*	(2.64)*	(2.67)*	(2.67)*	(2.64)*	(2.44)*	(2.44)*	(2.41)*
lnValueTransacton		-0.0135	-0.0140	-0.0128	-0.0136	-0.0139	-0.0127	0.0129	0.0112	0.0187
		-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0400
PaymentCash		0.0975	0.0965	0.0962	0.0973	0.0967	0.0974	0.1023	0.0948	-0.0584
		-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100
PaymentShares		0.0513	0.0479	0.0608	0.0512	0.0481	0.0614	0.3202	0.3139	0.4158
		-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0900	-0.0800	-0.1100
PaymentMixed		0.0303	0.0246	0.0339	0.0304	0.0244	0.0339	0.3815	0.4153	0.5937
		-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.1000	-0.1000	-0.1400

RelatedInd		-0.0524	-0.0509	-0.0812	-0.0527	-0.0506	-0.0803	0.0577	0.0697	0.1067
		-0.0200	-0.0200	-0.0300	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0300
Country control			Yes	Yes		Yes	Yes		Yes	Yes
Industry Control				Yes			Yes			Yes
Constant	20.219 8	- 35.961 4	- 35.885 0	- 35.830 6	- 34.993 3	- 34.913 7	- 34.855 6	- 36.395 8	- 36.487 0	- 35.950 9
	(2.21)*	(2.97)* *	(2.63)* *	(2.45)*	(2.88)* *	(2.54)*	(2.36)*	(3.05)* *	(2.74)* *	(2.53)*
Observations	1173	669	669	669	669	669	669	612	612	612
Absolute value of z statistics in parentheses where * significant at 5%; ** significant at 1%										

Appendix 10: FEVD analysis of PP conflicts (dividend to earnings)

Dependent Variable: Ratio of dividend to earnings										
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
LagDivEarn	-0.0053	-0.0751	-0.0756	-0.0793	-0.0755	-0.0760	-0.0797	-0.0764	-0.0769	-0.0807
	(4.37)*	(2.57)*	(2.57)*	(2.62)*	(2.57)*	(2.58)*	(2.62)*	(2.50)*	(2.51)*	(2.55)*
Earnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.9400	-1.8100	-1.8000	-1.7900	-1.8100	-1.8000	-1.7800	-1.5800	-1.5800	-1.5800
Lagearnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.3300	-0.0500	-0.0600	-0.0500	-0.0500	-0.0600	-0.0500	-0.7700	-0.7700	-0.7600
Largest Shareholder	0.0035	0.0001	0.0057	0.0058	0.0055	0.0056	0.0056	0.0057	0.0058	0.0058
	(6.01)*	-0.1600	(6.75)*	(6.52)*	(4.74)*	(4.73)*	(4.55)*	(6.30)*	(6.11)*	(5.84)*
SecondlargestShareholder								0.0004	0.0004	0.0005
								-0.1800	-0.1700	-0.2200
LargestShareholderSquared					0.0000	0.0000	0.0000			
					-0.1800	-0.2100	-0.1900			
lnCashFlow	-0.0359	-0.0983	-0.0982	-0.0982	-0.0984	-0.0983	-0.0983	-0.0999	-0.0999	-0.0999
	(4.68)*	(8.23)*	(8.18)*	(7.86)*	(8.22)*	(8.17)*	(7.85)*	(7.51)*	(7.48)*	(7.09)*
TDTA	-0.0013	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	(2.53)*	-0.1300	-0.1300	-0.0800	-0.1400	-0.1400	-0.0900	-0.1300	-0.1400	-0.0900
Beta	-0.0014	0.0031	0.0036	0.0048	0.0032	0.0039	0.0051	0.0038	0.0045	0.0053
	-0.1100	-0.1400	-0.1700	-0.2100	-0.1500	-0.1800	-0.2200	-0.1700	-0.1900	-0.2200
lnTotalAssets	-0.0012	-0.0114	-0.0114	-0.0114	-0.0114	-0.0114	-0.0115	-0.0117	-0.0117	-0.0118
	-0.7000	(4.09)*	(4.08)*	(4.02)*	(4.09)*	(4.09)*	(4.02)*	(3.86)*	(3.85)*	(3.78)*
Sales1YrGrth	0.0000	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010	-0.0010
	-0.5500	(2.66)*	(2.65)*	(2.59)*	(2.66)*	(2.65)*	(2.58)*	(2.36)*	(2.35)*	(2.30)*
Age	-0.0016	0.0008	0.0007	0.0008	0.0007	0.0007	0.0008	0.0009	0.0009	0.0010
	(2.15)*	-0.7000	-0.6800	-0.7000	-0.6800	-0.6500	-0.6800	-0.7300	-0.7200	-0.7500
dY0		0.0869	0.0869	0.0875	0.0870	0.0870	0.0876	0.0809	0.0810	0.0815
		(2.38)*	(2.38)*	(2.37)*	(2.38)*	(2.38)*	(2.37)*	(2.05)*	(2.04)*	(2.03)*
lnValueTransacton		0.0002	0.0002	0.0002	0.0003	0.0003	0.0004	0.0002	0.0002	0.0005
		-0.0300	-0.0200	-0.0300	-0.0400	-0.0300	-0.0500	-0.0300	-0.0200	-0.0600
PaymentCash		0.0088	0.0082	0.0032	0.0090	0.0085	0.0042	0.0080	0.0075	-0.0002
		-0.0700	-0.0600	-0.0200	-0.0700	-0.0700	-0.0300	-0.0600	-0.0600	0.0000
PaymentShares		0.0075	0.0071	0.0070	0.0079	0.0076	0.0077	0.0062	0.0058	0.0065
		-0.1100	-0.1100	-0.1000	-0.1200	-0.1100	-0.1100	-0.0900	-0.0800	-0.0900
PaymentMixed		-0.0025	-0.0009	-0.0022	-0.0028	-0.0013	-0.0021	-0.0032	-0.0011	-0.0005
		-0.0400	-0.0100	-0.0300	-0.0400	-0.0200	-0.0300	-0.0400	-0.0200	-0.0100

RelatedInd		-0.0027	-0.0029	-0.0051	-0.0019	-0.0019	-0.0041	-0.0024	-0.0020	-0.0028
		-0.0500	-0.0600	-0.1000	-0.0400	-0.0400	-0.0800	-0.0400	-0.0300	-0.0500
u[idcode]		1.0408								
		(22.44) **								
Country control			Yes	Yes		Yes	Yes		Yes	Yes
Industry Control				Yes			Yes			Yes
Constant	0.7507	2.0011	1.8204	1.8567	1.8295	1.8229	1.8600	1.8527	1.8511	1.8479
	(5.43)* *	(8.96)* *	(7.51)* *	(5.27)* *	(8.29)* *	(7.51)* *	(5.27)* *	(7.56)* *	(6.91)* *	(4.44)* *
Observations	1170	672	672	672	672	672	672	615	615	615
R-squared	0.3000	0.4800	0.4800	0.4800	0.4800	0.4800	0.4800	0.4800	0.4800	0.4800
Absolute value of z statistics in parentheses where * significant at 5%; ** significant at 1%										

### Appendix 11: FEVD analysis of PP conflicts (dividend to sales)

Dependent Variable: Ratio of dividend to sales										
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
LagDivSales	-0.6529	0.0349	0.0348	0.0347	0.0349	0.0349	0.0348	0.0378	0.0378	0.0373
	(9.96)* *	-0.5900	-0.5900	-0.5700	-0.5900	-0.5900	-0.5700	-0.6000	-0.6000	-0.5800
Earnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.6300	-0.9400	-0.9300	-0.9200	-0.9400	-0.9300	-0.9200	-0.7800	-0.7800	-0.7700
LagEarnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.0700	-0.4400	-0.4400	-0.4400	-0.4400	-0.4400	-0.4400	-0.0600	-0.0600	-0.0500
Largest Shareholder	0.0016	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(6.72)* *	-0.1400	-0.1300	-0.1300	-0.0900	-0.0900	-0.0800	-0.1300	-0.1200	-0.1100
SecondlargestShareholder								0.0000	0.0000	0.0000
								-0.0400	-0.0400	-0.0400
LargestShareholder Squared					0.0000	0.0000	0.0000			
					0.0000	-0.0100	-0.0100			
lnCashFlow	-0.0673	0.0216	0.0216	0.0216	0.0216	0.0216	0.0216	0.0222	0.0222	0.0222
	(22.07) **	(6.53)* *	(6.49)* *	(6.20)* *	(6.51)* *	(6.47)* *	(6.16)* *	(5.93)* *	(5.90)* *	(5.61)* *
TDTA	-0.0007	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	(3.40)* *	-0.5100	-0.5100	-0.4900	-0.5100	-0.5100	-0.4900	-0.4900	-0.4800	-0.4700
Beta	-0.0012	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0002	-0.0001
	-0.2200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200
lnTotalAssets	-0.0090	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034	0.0034
	(12.96) **	(4.17)* *	(4.16)* *	(4.08)* *	(4.16)* *	(4.15)* *	(4.06)* *	(3.85)* *	(3.84)* *	(3.76)* *
Sales1YrGrth	0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0004	-0.0005	-0.0005	-0.0005
	(9.93)* *	(4.10)* *	(4.09)* *	(3.98)* *	(4.10)* *	(4.09)* *	(3.97)* *	(3.82)* *	(3.80)* *	(3.70)* *

Age	-0.0002	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.6600	-0.0900	-0.0900	-0.0800	-0.0900	-0.0900	-0.0800	-0.0500	-0.0500	-0.0500
dY0	2.7974	1.0001	1.0001	1.0001	1.0001	1.0001	1.0001	1.0001	1.0001	1.0001
	(123.88)**	(160.41)**	(159.59)**	(157.51)**	(160.29)**	(159.44)**	(157.33)**	(152.81)**	(151.89)**	(149.81)**
lnValueTransacton		0.0200	0.0200	0.0200	0.0200	0.0200	0.0200	0.0217	0.0217	0.0217
		-1.8400	-1.8300	-1.8100	-1.8300	-1.8300	-1.8100	-1.8200	-1.8200	-1.8000
lgValTrans		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	-0.0001	0.0000	-0.0001
		-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0300
PaymentCash		-0.0002	-0.0002	-0.0003	-0.0002	-0.0002	-0.0003	-0.0014	-0.0015	-0.0017
		0.0000	0.0000	-0.0100	0.0000	0.0000	-0.0100	-0.0300	-0.0400	-0.0400
PaymentShares		-0.0001	-0.0001	-0.0002	-0.0001	-0.0001	-0.0002	-0.0007	-0.0008	-0.0010
		-0.0100	0.0000	-0.0100	-0.0100	0.0000	-0.0100	-0.0300	-0.0400	-0.0500
PaymentMixed		-0.0002	-0.0001	-0.0003	-0.0002	-0.0001	-0.0003	-0.0007	-0.0008	-0.0012
		-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0300	-0.0300	-0.0500
RelatedInd		0.0003	0.0003	0.0003	0.0003	0.0003	0.0003	0.0017	0.0017	0.0018
		-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.1000	-0.1000	-0.1000
Country control			Yes	Yes		Yes	Yes		Yes	Yes
Industry Control				Yes			Yes			Yes
Constant	1.2954	-0.3393	-0.3395	-0.3400	-0.3393	-0.3395	-0.3402	-0.3494	-0.3499	-0.3528
	(23.75)**	(5.62)*	(4.94)*	(3.31)*	(5.58)*	(4.89)*	(3.30)*	(5.13)*	(4.51)*	(2.89)*
Observations	1188	681	681	681	681	681	681	624	624	624
R-squared	0.9300	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
Absolute value of z statistics in parentheses where * significant at 5%; ** significant at 1%										

## Appendix 12: FEVD analysis of PP conflicts (dividend to market capitalisation)

Dependent Variable: Ratio of Dividend to market capitalisation										
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9	Model 10
lagdivmcap	-0.1859	-0.2986	-0.2987	-0.2987	-0.2986	-0.2987	-0.2987	-0.2981	-0.2983	-0.2983
	(5.72)*	(8.48)*	(8.44)*	(8.34)*	(8.47)*	(8.44)*	(8.33)*	(8.07)*	(8.04)*	(7.94)*
Earnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.7700	-0.6800	-0.6700	-0.6600	-0.6800	-0.6700	-0.6600	-0.8200	-0.8100	-0.8000
Lagearnasset	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	-0.7600	-0.5400	-0.5400	-0.5300	-0.5400	-0.5400	-0.5300	-0.7600	-0.7600	-0.7500

Largest Shareholder	0.0003	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
	(4.51)*	(5.66)*	(5.41)*	(5.20)*	(3.97)*	(3.94)*	(3.77)*	(5.05)*	(4.86)*	(4.63)*
	*	*	*	*	*	*	*	*	*	*
SecondlargestShareholder					0.0000	0.0000	0.0000			
					-0.0100	0.0000	-0.0100			
LargestShareholderSquared								0.0000	0.0000	0.0000
								-0.0300	-0.0400	-0.0300
lnCashFlow	-0.0033	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0027	-0.0030	-0.0030	-0.0030
	(3.57)*	(2.03)*	(2.02)*	-1.9300	(2.02)*	(2.01)*	-1.9200	(1.99)*	(1.98)*	-1.9000
	*	*	*		*	*		*	*	
TDTA	-0.0002	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	(3.56)*	-1.1600	-1.1400	-1.1100	-1.1600	-1.1400	-1.1000	-1.1400	-1.1300	-1.0800
	*									
Beta	-0.0012	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
	-0.7400	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0400	-0.0300	-0.0300
lnTotalAssets	0.0001	0.0000	0.0000	-0.0001	-0.0001	0.0000	-0.0001	0.0000	0.0000	0.0000
	-0.3800	-0.1500	-0.1500	-0.1500	-0.1500	-0.1500	-0.1500	-0.0100	-0.0100	-0.0300
Sales1YrGrth	0.0000	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	-0.4200	(2.08)*	(2.07)*	(2.01)*	(2.08)*	(2.07)*	(2.01)*	-1.9600	-1.9600	-1.8900
Age	0.0005	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	(5.02)*	-0.9700	-0.9600	-0.9100	-0.9600	-0.9500	-0.9100	-0.7800	-0.7600	-0.7200
	*									
dY0	1.0511	1.0063	1.0064	1.0065	1.0063	1.0064	1.0065	1.0057	1.0059	1.0062
	(22.61)**	(23.85)**	(23.69)**	(23.01)**	(23.83)**	(23.67)**	(22.99)**	(22.32)**	(22.22)**	(21.53)**
	**	**	**	**	**	**	**	**	**	**
lnValueTransacton		0.0137	0.0137	0.0137	0.0137	0.0137	0.0137	0.0134	0.0134	0.0134
		(3.12)*	(3.11)*	(3.08)*	(3.12)*	(3.11)*	(3.07)*	(2.81)*	(2.81)*	(2.78)*
		*	*	*	*	*	*	*	*	*
lgValTrans		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0001	0.0001
		-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0300	-0.0600	-0.0700	-0.0700
PaymentCash		0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0000	0.0000	0.0000
		0.0000	0.0000	-0.0100	0.0000	0.0000	-0.0100	0.0000	0.0000	0.0000
PaymentShares		0.0001	0.0001	0.0002	0.0001	0.0001	0.0002	0.0002	0.0002	0.0003
		-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0200	-0.0300
PaymentMixed		0.0001	0.0002	0.0002	0.0001	0.0002	0.0002	0.0003	0.0004	0.0006
		-0.0200	-0.0200	-0.0300	-0.0200	-0.0200	-0.0300	-0.0300	-0.0400	-0.0600
RelatedInd		-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0000	0.0000	0.0000	0.0001
		-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	-0.0100	0.0000	-0.0100
Country control			Yes	Yes		Yes	Yes		Yes	Yes
Industry Control				Yes			Yes			Yes
Constant	0.0729	0.0631	0.0627	0.0628	0.0631	0.0627	0.0628	0.0664	0.0665	0.0670
	(4.41)*	(2.61)*	(2.28)*	-1.5200	(2.60)*	(2.26)*	-1.5100	(2.45)*	(2.19)*	-1.8300
	*	*	*		*	*		*	*	
Observations	1189	683	683	683	683	683	683	626	626	626
R-squared	0.3500	0.5000	0.5000	0.5000	0.5000	0.5000	0.5000	0.4900	0.4900	0.4900

Absolute value of z statistics in parentheses where \* significant at 5%; \*\* significant at 1%

Appendix 13 : FEVD analysis of PA conflicts and large shareholder

	(1)	(2)
	<b>Efficiency Ratio (PA Conflicts)</b>	
Lship	0.000001 (0.00)	0.000004 (0.01)
Lshipsquare		-0.000000 (0.01)
Earnasset	0.000000 (1.61)	0.000000 (1.61)
Learnasset_1	0.000000 (0.97)	0.000000 (0.97)
lgcf	0.004793 (1.16)	0.004796 (1.16)
TDTA	-0.000195 (0.73)	-0.000195 (0.72)
Beta	-0.000227 (0.03)	-0.000227 (0.03)
lnTotalAssets	0.000977 (0.98)	0.000977 (0.98)
Sales1YrGrth	0.001595 (11.73)***	0.001595 (11.72)***
Age	-0.001465 (3.66)***	-0.001464 (3.63)***
dY0	-0.000980 (0.07)	-0.000982 (0.07)
lgValTrans	0.000021 (0.01)	0.000019 (0.01)
paymmdummy== 1.0000	-0.000202 (0.00)	-0.000206 (0.00)
paymmdummy== 2.0000	0.000179 (0.01)	0.000170 (0.01)
paymmdummy== 3.0000	0.000142 (0.01)	0.000150 (0.01)
relateddumm== 1.0000	-0.000385 (0.02)	-0.000399 (0.02)
Ordinalform	0.000005 (0.02)	0.000005 (0.02)
Constant	0.822359 (11.03)***	0.822282 (10.96)***
Observations	683	683
R-squared	0.9576 883.2***	0.9576 832.88***
Absolute value of t statistics in parentheses * significant at 5%; ** significant at 1%		