

## 5.4 Capital Markets

### TUNNELING, OVERLAPPING OWNER, AND INVESTOR PROTECTION: EVIDENCE FROM MERGER AND ACQUISITION IN ASIA<sup>ψ</sup>

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#### *Abstract*

*Tunneling is to describe transfer resource out of the firm for benefit of their controlling shareholders. Better legal protection and stronger social norms improve minority shareholders' protection from expropriation. They consequently reduce the private benefits of controlling shareholders (La Porta, 1999). This study aims to investigate tunneling in the context merger and acquisition (M&A) and to examine whether tunneling occurs only in emerging markets with poor law enforcement or whether it also occurs in developed countries.*

*This study documents that managers are more likely to overpay target in merger and acquisition with high overlapped owner which have stakes in bidder and target firm. That overpayment, a transfer of wealth from owners of bidder's firm to overlapping owners, is a type of tunneling. This study concludes that tunneling occurs in nations not only with low investor protection, but also with high investor protection.*

**Key words:** *tunneling, expropriation, merger & acquisition, investor protection*

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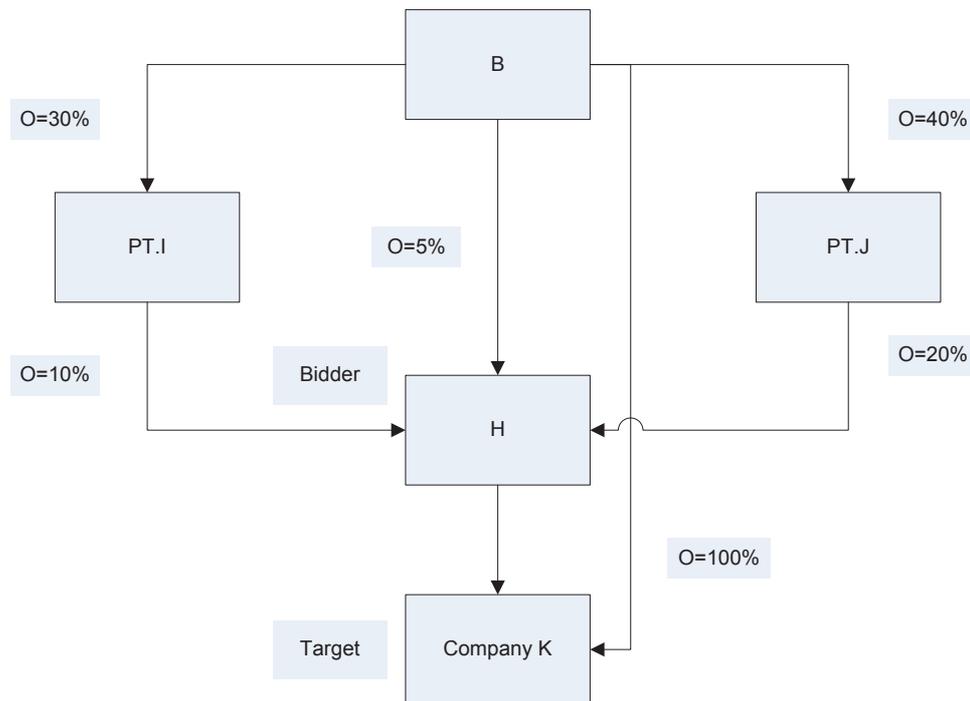
<sup>ψ</sup>This paper is dedicated to honour the late Mas'ud Machfoedz (formerly accounting professor at Universitas Gadjah Mada); <sup>#</sup>Universitas Gadjah Mada; \*Ph.D Student Gadjah Mada University/ Universitas Negeri Yogyakarta; <sup>&</sup>Sanata Dharma Catholic University at Yogyakarta.

## INTRODUCTION

Weak corporate law and lack of enforcement mechanism raise fears of expropriation for minority shareholders around the world. These fears seem especially warranted in the presence of business group, a common organizational form in many developed and developing countries. The controlling shareholders have strong incentives to siphon resources out of the firm to increase their wealth (Johnson, et al. 2000). Tunneling is to describe the transfer resource out of the firm for the benefit of their controlling shareholders. Tunneling occurs when someone transfer wealth from company where he has low right of cash flow to another company where he has higher right of cash flow (Johnson, et al. 2000). If prevalent, tunneling may have serious consequences. It can hinder equity market growth and overall financial development. Illicit profit transfers may also reduce the transparency of the entire economy, cloud accounting numbers and complicate any inference about firm health. The purpose of this study is to investigate tunneling in the context of merger and acquisition (M&A) with emphasis on both sides of M&A, bidder and target companies.

We study merger and acquisition because managerial objective and corporate governance mechanisms play important roles when managers acquire other firms. For instance, tunneling could be a major motivation for some acquisition activities of affiliated firms. If a member firm within group has poor financial performance, the owner managers' solution would be to merge it with a more successful firm within the same group. If acquiring bad target maximized the aggregate value of the group despite overpayment, acquisitions are good news for controlling owner, even though they are bad news for the minority shareholders of the bidding firm.

Tunneling can take place in the form of outright theft or fraud or more subtle legal form, such as dilutive share issueances that discriminate minority shareholders and merger between affiliated firm to siphon resources out of the bidder or target. Figure 1 illustrates tunneling. Assumes that company B owns 35% votes (5% direct and 30% indirect votes) and 16 % cash flow right of bidder (through 5% direct ownership and 11% indirect ownership) and 100% vote and cash flow right of target (company K). If the overlap owner (B) through his control of the bidder overpay the target, the overlap owner will gain 100% of the overpayment while only paying 16% for it. Thus, there is transfer wealth from bidder company which overlap owner has low cash flow right to target company which overlap owner have higher cash flow right.



**Figure 1** Ownership Structure

Previous study in Merger & Acquisition emphasizes on gain or loss in one side, bidder or target. Thompson et al. (1995) emphasize that ignoring a side to the M&A deal would lead to partial and incomplete understanding of the process and thus the outcomes. In particular, how corporate governance characteristics at both firms have interacted. Furthermore, how corporate governance characteristics affect the aggregate outcomes for the combined firm. To get further understanding of the M&A outcomes as well as the significant factors that affect M&A performance, the corporate governance characteristics of both firms should be considered.

Some studies on M&A have argued that the value creation or destruction in the M&A process should be examined conjointly for the acquiring and target firms (Seth, 1990). Traditionally acquiring and target firms are treated as owned by separate sets of owners that seek to maximize their shareholder wealth. In reality, however, the acquiring and target firms often have particularly same owners.

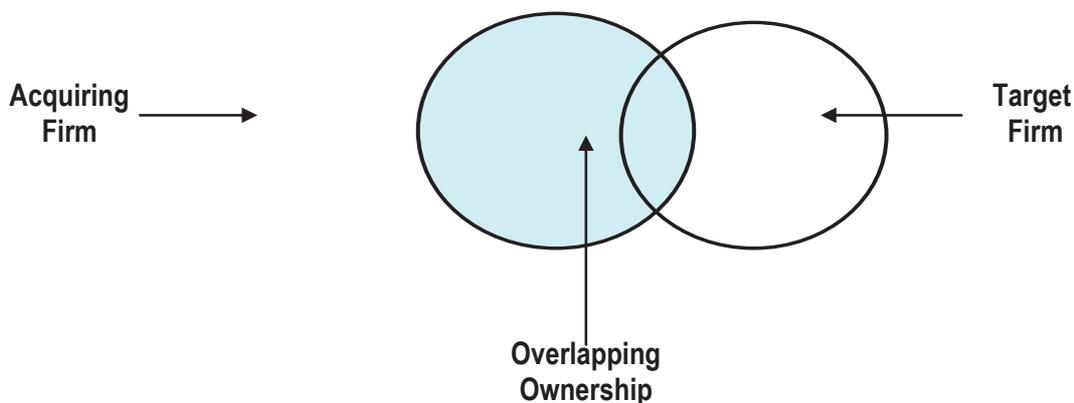


Figure 2. Overlapping Owner

Such overlapping owners that hold stock in both the acquiring and the target firm are more likely to be interested in the total gain from this transaction (Hansen and Lott, 1996; Easterbrook and Fischel, 1982). Contradictory to ‘solo’ investors, overlapping investors would be more concerned at maximizing their portfolio value, rather than maximizing the shares value of the acquiring firm.

In the context of mergers and acquisitions when shareholders of the acquiring firm are simultaneously owners of the target firm, they’ll be more concerned with the total gain, or portfolio effect from this acquisition. Particularly, they will stand to gain from the transaction as shareholders of the target firm. Inversely, ‘solo’ shareholders that own stocks in the acquiring firm but not in the target firm will be concerned with the stock returns of the acquiring firm. Such heterogeneity of owners’ interests could weaken the monitoring by principals, as well as the impact of such monitoring on agents. Thus, posing less restraint on managerial propensity engages in value destroying acquisitions.

The acquisition of LG Merchant Bank by LG Securities, both belong to the LG Group illustrates tunneling. LG merchant Bank was money-losing entity. To recapitalize debt-ridden LG Merchant Bank, the LG Group announced that LG Securities, considered to be the most profitable firms in the group, would acquire LG Merchant Bank. The LG official said the merger reflects the LG Group’s long term plan to foster the brokerage house into an investment bank and consolidate its financial operations (Korea Herald, 1999). In the other side, brokerage’s trade union and minority shareholders of LG Securities opposed the merger, saying that it would impair the value of their share (Korea Herald, 1999). At the time of the merger announcement, the controlling family of the LG group held 18% of the outstanding shares in LG securities and 60% in LG Merchant Bank. This means that if controlling

family had overpaid for the acquisition by \$1, it would have lost 18 cents through LG securities but gained 60 cents through LG Merchant Bank. It would have been better off. However, other shareholders in LG Securities would have lost 82 cents.

Recent financial research has examined the importance of corporate ownership structure (La Porta et al., 1999) and legal origins (La Porta et al., 2000) on the private benefits of control and protection of minority shareholders. Better legal protection and stronger social norms improve minority shareholders' protection from expropriation and consequently reduce the private benefits of controlling shareholders. Johnson et al. (2000) argue that tunneling occurs not only in countries with effective law enforcement but also in countries whose capital markets are still emerging. Therefore, the overall impact of differing corporate ownership structures and legal systems on the private benefits of control becomes an empirical question. Therefore, this paper also has additional objectives that examine whether tunneling occurs only in emerging markets with poor law enforcement or whether it also occurs in developed countries.

Bae et al. (2002) find that wealth is tunneled or transferred by subway to the majority shareholders within Korean Chaebol by means of mergers to bail out troubled group members. Bertrand et al. (2002) document tunneling within Indian pyramids. Facio and Stolin (2006) examine the hypothesis that acquisitions undertaken by group-affiliated firms disproportionately benefit the bidder's controlling shareholder. They use a novel methodological approach to compare the announcement-period change in the stock market wealth of the bidder's controlling shareholder with the change in wealth implied by that shareholder's (direct and/or indirect) stake in the bidder. They find no evidence that acquisitions are used to tunnel resources to other companies in the bidder's group to the controlling shareholder's advantage. Claessens et al. (1999) find a positive impact of diversification within industrial groups for their sample of East Asian companies, while in contrast Lins and Servaes (2002) show that diversifying mergers within industrial groups reduces the wealth of minority shareholders in their sample of firms from seven emerging markets.

Our approach to investigate tunneling is different from Bertrand et al. (2000), Facio and Stolin (2006) and Bae et al. (2002). Bertrand explores evidence of tunneling by examining how various firms respond to external shocks to their accounting measure of performance. Facio and Stolin (2006) and Bae et al. (2002) investigate how investors in the stock market react to acquisition events. Contrary to former tunneling investigations, we distinguish mergers where there is an owner of the bidder who

simultaneously owns bidder and target shares (*overlapping owners*) and *solo owners*, that own stock in the acquiring firm but not in the target. Tunneling occurs when there is tendency to overpay the target in merger with high overlap ownership rather than in merger with low overlap ownership.

While Bertrand et al. (2002) use setting Indian business group, Holmen and Knopf (2004) concern at Swedish merger, Facio and Stolin (2006) study at western European companies and Bae et al (2002) use Korean Business group. All of the studies focus in Asia companies. The Asian countries provide a useful setting for testing tunneling, because we can examine effectiveness of law enforcement to protect minority shareholders. Leuz (2003) has clustered countries based on investor protection variable. The first cluster is characterized by large stock markets, low ownership concentration, extensive outside right, high disclosure and strong legal enforcement. Asia countries that include in the first cluster are Singapore, Hongkong and Malaysia. The second and third cluster show markedly smaller stock markets, higher ownership concentration, weaker investor protection, lower disclosure levels and weaker enforcement. Taiwan and Japan are in the second cluster. The third cluster are Korea, Indonesia and Thailand. Comparison between those clusters will give better understanding, whether tunneling occurs only in country with weak legal enforcement or occurs in country with strong legal enforcement.

We believe that this study is useful to (1) identifies factors that introduce noise in the assessment of managers and allows them to pursue value-destroying deals. In particular, in the context of mergers and acquisitions, investors that have stock interests in both the acquiring and target firm will likely have different perspective on the proposed business combination than ‘solo’ investors of the acquiring firm. This research focuses on both side of M&A, bidder and target, to give complete understanding of the process and the outcome of M&A, (2) show the new method to measure tunneling that is different from all prior research, (3) explain about tunneling, one form of expropriation minority shareholders.

The remains of this study is organized as follows. First, this study discuss theoretical framework and hypothesis development. Second, this study develops research method and sequentially conjectures some conclusion in next section.

## **LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT**

M&A is a profoundly studied topic, recent meta-analysis by King et al. (2004) concludes that the factors impacting the financial performance of firms engaging in M&A remain largely unexplained.

Some studies on M&A have argued that the value created/destroyed in the M&A process should be examined conjointly for the acquiring and target firms (Seth, 1990). Traditionally acquiring and target firms are treated as owned by separate sets of owners that seek to maximize their shareholder value. In reality, however, the acquiring and target firms often have some of the same owners (see Figure 1). Such overlapping owners, owners that hold stock in both the acquiring and the target firms, are more likely to be interested in the total gain from the transaction (Hansen and Lott, 1996; Easterbrook and Fischel, 1982). Paradoxical to ‘solo’ investors, overlapping investors would be more concerned at maximizing their portfolio value, rather than maximizing their shares value of the acquiring firm.

The present study undertakes a different approach in identifying heterogeneous ownership interests by looking at two types of owners – (1) overlapping owners that hold stock of both the acquiring and the target firm, and (2) ‘solo’ (or non-overlapping) owners, that hold stock of the acquiring firm but not of the target. It also corrects for methodological problems, since Graebner & Eisenhardt (2004) emphasize that ignoring a side to the M&A deal would lead to partial and incomplete understanding of the process and thus the outcomes.

Furthermore, the M&A context represents an adversary setting, where the division of the value created or alternatively value destroyed is affected by the relative bargaining power of the acquiring firm and the target, competitiveness of the market for acquisitions, presence of multiple bidders, and method of payment (Coff, 1993; Seth, 1990). Prior research recognizes that legitimate reasons for M&A activity exist, which could benefit the combined entities through realizing synergies from resources combination, increasing market power, tax savings, R&D, and marketing spillovers, or increasing efficiency (Saxton & Dollinger, 2004; Brush, 1996; Ranft & Lord, 2002; Sirower, 1997; Healy et al., 1992; Morck et al., 1988; Scherer, 1988). Given the adversarial nature of the M&A process, however, such benefits may be captured by the target firm. There is value to be created as a result of the combination, this “*value is being transferred.*” Therefore, looking at the losses and gains at the acquiring firm only may not be very informative about the overall value-creating effect of the deal.

Under the wealth transfer hypothesis, shareholders of the acquiring firm may lose their stocks value if management overpays for the target. In this case, however, the loss at the acquirer will be offset by a gain at the target firm, as the shareholders of the target will enjoy higher returns due to the value transferred or extracted from the bidder’s shareholders. Furthermore, if overlapping owners influence the deal as Holland (1998) suggest, they are in a position to ensure that the overall effect from the deal

is beneficial for them. Thus, looking at the aggregate outcomes for both firms represents an important challenge for research. Particularly, M&A is a non-repeatable event—firms have only one shot to get it right, face considerable information asymmetries and cannot remedy their actions without incurring significant expenses (Reuer, 2005).

Weak corporate law and lack of law enforcement mechanism augments expropriations' fears for minority shareholders around the world. These fears seem especially warranted in the presence of business group, a common organizational form in many developed and developing countries. The controlling shareholder will want to tunnel or transfer with subway, profit across firms, moving them from firms where he has low cash flow right to firms where he has high cash flow right. Cash can be transferred in many ways: the firms can give each other high (or low) interest rate loans, manipulate transfer pricing or sell assets to each other at above or below market prices, dilutive share issues that discriminate against minority shareholders and merger between affiliated firm to siphon resources out of the bidder or target.

Tunneling comes in two forms. First, a controlling shareholder can simply transfer resources from the firm for his own benefit through self-dealing transactions. Such transactions include outright theft or fraud, which is illegal everywhere (though often goes undetected or unpunished), but also asset sales and contracts such as transfer pricing advantageous to the controlling shareholder, excessive executive compensation, loan guarantees, expropriation of corporate opportunities, and so on. Second, the controlling shareholders can increase their share of the firm without transferring any assets through dilutive share issues, minority freeze-outs, insider trading, creeping acquisitions, or other financial transactions that discriminate against minorities.

Bae et al. (2002) examine whether firms belonging to Korean business groups (chaebols) benefit from acquisitions that they make. In other words, such acquisitions provide a way for controlling shareholders to increase their wealth by increasing the value of other group firms (tunneling). They explore the nature of business groups in emerging markets and examine two competing views of them: the view of Khanna and Palepu (2000) that they add value to their member firms (the "value added view") and the view of Johnson et al. (2000) that they provide the controlling shareholders with an opportunity for wealth transfer from the firm for the benefit of the controlling shareholders (the "tunneling view"). To evaluate these competing views, they examine merger activity. They find that when a chaebol-affiliated firm makes an acquisition, its stock price on average falls. While minority

shareholders of a chaebol-affiliated firm making an acquisition lose, the controlling shareholder of that firm on average benefits because the acquisition enhances the value of other firms in the group. This evidence is consistent with the tunneling hypothesis.

Bertrand et al (2002) Find evidence that owners of business groups are often accused of expropriating minority shareholders by tunneling resources from firms where they have low cash flow rights to firms where they have high cash flow rights. Indian groups appear to tunnel by manipulating non operating components of profits (such as miscellaneous and nonrecurring items). In fact, there is no evidence of tunneling on operating profits alone. Rather, non operating losses and gains seem to be used to offset real profit shocks or transfer cash from other firms. Finally, they examine whether market prices incorporate tunneling. They find that high market-to-book firms are more sensitive to both their own shock and shocks to the other firms in their group. Firms whose *group* has a high market-to-book are also more sensitive to their own shock, but are not significantly more sensitive to the group's shock. This suggests that the stock market at least partly penalizes tunneling activities. They find a significant amount of tunneling, it mostly occurs via non operating components of profit.

Holmen and Knopf (2004) investigate several companies in Sweden, and find limited evidence of shareholder expropriation. Swedish companies have a high degree of ownership separation from control through pyramids, dualclass shares, and cross-holdings. This increases the potential for private benefits of control. However, Swedish extralegal institutions are consistent with greater shareholder protection. Using data on Swedish mergers they find limited evidence of shareholder expropriation. Apparently, Swedish extralegal institutions offset the drawback of weak corporate governance.

Faccio and Stolin (2006) investigates the presence of unanticipated transfers of value in corporate acquisitions, using a pan-European sample. They broadly define expropriation as the disproportional sharing of gains (or losses) among different shareholders. They find that the wealth average of the controlling families does not increase proportionately to what is implied by the families' investment in the bidder. For the whole sample, the change in value implied by the bidder's abnormal return (i.e., the change in value that should take place in absence of expropriation) has average of -976.3 (thousand US\$), while the actual change in wealth experienced by the bidder's controlling shareholder is -1,481.4. This result is clearly inconsistent with expropriation.

Overlapping owners are more concerned with the total gain from the transaction, rather than how the gain is allocated between the acquiring and target firm (Easterbrook and Fischel, 1982). Thus,

managers of acquiring firms with dominant overlapping ownership would be likely less constrained to overpay for the target firms. Although 'solo' owners interests are hurt by such overpayments, overlapping owners could extract benefits from the overpayment in their capacity as target firm's shareholders. Thus, contradictory to 'solo' owners, overlapping owners are likely less critical to management in instances when executives overpay for the target or pursue bigger deals. Under the wealth transfer hypothesis, shareholders of the acquiring firm may lose their stock values if management overpays for the target. However, the loss at the acquirer will be offset by a gain at the target firm, as the shareholders of the target will enjoy higher returns due to the value transferred or extracted from the bidder's shareholders. Furthermore, if overlapping owners influence the deal as Holland (1998) suggested, they are in a position to ensure that the overall effect from the deal is beneficial for them. Overpayment to target serves as transfer of wealth from other bidder shareholders to the overlap owner.

**Hypothesis 1:** Overlapping ownership will be positively related to the announced value of the deal.

Ignoring one side of M&A deal would lead to partial and incomplete understanding of the process and the outcome, we propose Hypothesis 2-3 that corporate governance on both firms (target and bidder) will reduce tunneling.

**Hypothesis 2:** Corporate governance at bidder's firm has negative effect on the announced value of deal, especially corporate governance at bidder's firm reduce overpayment.

**Hypothesis 3:** Corporate governance at target's firm has negative effect on the announced value of deal, especially corporate governance at target's firm reduce overpayment.

Recent research shows that legal protection of minority shareholders and creditors is an empirically significant determinant of financial development across countries (La Porta et al., 1997). Company law in civil-law countries is less protective of minority shareholders than that in common-law countries (La Porta et al., 1998). Courts in civil-law countries may tolerate more tunneling than courts in common law countries because of: (i) a narrower application of the duty of loyalty largely to transactions with no business purpose, (ii) a higher standard proof in conflict-of-interest situations, (iii)

a greater responsiveness to stakeholder interests, and (iv) a greater reliance on statutes rather than fairness when regulating self dealing transactions. In this paper, we focus specifically on the legal treatment of minority shareholders in different legal systems with respect to tunneling.

**Hypothesis 4:** Investor protection has negative relationship with the announced value of deal

**Hypothesis 5:** Investor protection has moderating effect on the relationship between overlapping owner and the announced value of deal.

## RESEARCH METHOD

### DATA SOURCE AND SAMPLE SELECTION

This research collects all merger and acquisitions from Zephyr database for the period 1999-2007. In addition, this study also documents ownership structure and financial statement obtain from osiris database.

### HYPOTHESIS EXAMINATION

Hypothesis 1 – 5 would be examined by the following regression.

$$DV = \beta_1 + \beta_2 \text{TotOv} + \beta_3 \text{CGbidder} + \beta_4 \text{CGtarget} + \beta_5 \text{IPbidder} + \beta_6 \text{IPtarget} + \beta_7 \text{control variables} + \varepsilon$$

DV : Deal value

TotOv : Total Overlap Owner

CGbidder : Corporate Governance bidder's company

CGtarget : Corporate Governance target's company

IPbidder : Investor Protection bidder

IPtarget : Investor Protection target

### VARIABLES DESCRIPTION

#### DEPENDENT VARIABLE:

##### 1. Deal value

Deal value is the sum of payment from bidder for target company relative to firm value of target. We measure firm value with book value of target firm preceding of the deal. Book values are measured by total assets.

## INDEPENDENT VARIABLES:

### 1. Overlapping owner's percentage in the acquiring-target firm

In order to calculate a joint overlapping measure for both firms, percentages owned by overlapping owners in acquiring (target) firm were combined then scaled with the market value of acquiring (target) firm.

$$Joint\_Overlap = \frac{TB * MVB + TT * MVT}{MVB + MVT}$$

TB:	the percentage owned by overlapping owners in the acquiring firm was calculated as the sum of ownership stakes at acquiring firm of all owners that held stock at both the acquiring and the target preceding the announcement of the deal
MVB	market value of bidder company
TT	the percentage owned by overlapping owners in the target firms was calculated as the sum of ownership stakes at target firm of all owners that held stock at both the bidder firm and the target firm preceding announcement of the deal.
MVT	market value of target firm

### 2. Corporate Governance

Corporate governance was measured by indicator of firms' independency to signify the company degree of independence with regard to its shareholder. Brickley et al (1988) suggest that only owners that are independent from managerial influence will adequately monitor and likely to oppose the self-serving action of managers. Based on BvD's database independence indicators are noted as A, B, and C with further qualification as follows.

Indicator A	Company with no recorded shareholder with an ownership over 24.99% (either direct or total). This is further qualified as A+, A, or A-
Indicator B	Company with one or more shareholders with an ownership percentage over 24.99% and no recorded shareholder with an ownership percentage (direct or total) over 49.99%. The further qualifications of B+, B and B- are then assigned.
Indicator C	Company with a recorded shareholder with an ownership (direct or indirect) over 49.99%. The C indicator is also given to a company that has an ultimate owner identification.

The greater level of independency is the less power the overlap owner has to influence the deal to ensure that the overall effect from the deal is beneficial for them. The greater level of independency will reduce tunneling or overpayment to target.

### 3. Investor Protection

Based on all items below, countries were clustered into three levels of investor protections (Leuz, 2003). The parameter to measure level of investor protections are:

a. Outside Investor Right. Mechanisms in corporate law protect the rights of outside (minority) investors and attenuate agency problems between insider (controlling) owners and outside/minority owners. The outside investor rights variable is the anti-director rights index created by La Porta et al (1998). It is an aggregate measure of minority shareholder rights and ranges from zero to five.

b. Disclosure requirements. The disclosure index (DIS\_REQ) measures the extent of disclosure requirement of information for securities issued by firms through a prospectus including information on the compensation of executives, shareholder ownership structure, inside ownership, unusual contracts, and related-party transactions.

c. Importance of equity market. The Importance of Equity Market is measured by the mean rank across three variables used in La Porta et al. (1998): (1) the ratio of the aggregate stock market capitalization held by minorities to gross national product, (2) the number of listed domestic firms relative to the population, and (3) the number of IPOs relative to the population. Each variable is ranked in such way, so that the higher scores indicate a greater importance of the stock market.

d. Legal enforcement. Legal enforcement is measured as the mean score across three legal variables used in La Porta et al (1998): (1) the efficiency of the judicial system, (2) an assessment of rule of law and (3) corruption index. All three variables were scaled from zero to ten.

#### CONTROL VARIABLES:

To control for variation in deal value, the regression model include control variables:

##### 1. Performance

Firm performance was measured as return on assets (ROA) and Return on Shareholders (ROS), consistent with prior research (Haunschild, 1993; Sanders, 2001). *The greater performance value the greater deal value*

## DATA ANALYSIS AND FINDINGS

### Descriptive Statistics

This study obtains data from ZEPHYR and OSIRIS database. ZEPHYR database contains merger and acquisition data. OSIRIS database contains financial data from annual reports of publicly traded around the world. The final sample consists of 104 M&A deal with overlapping owner, across seven countries for fiscal years 2005-2007. Table 1 present descriptive statistics, including the means and standard deviation for all study variables. Mean of deal value relative to book value is 106.023 and its standard deviation is 258.427. Mean of deal value relative to book value in high overlap owners is 171.443, while in the low overlap owner is 49.94. It could be inferred that mean of deal value in high overlap owner is higher rather than in low overlap owner. It suggest that in high overlap owner's deal, the probability of overpayment to the target is higher than in low overlap owner's deal. More description of table 1. While, the others could be inferred with the same methods.

**Table 1** Descriptive Statistics

<b>Variables</b>	<b>Mean</b>	<b>Min.</b>	<b>Max.</b>	<b>Std. Dev.</b>
DealValue/ Book Value	106.023	0.07	2309.64	258.427
Total Overlap Owner	7.0076	0.01	92.97	13.953
High Total Overlap Owner	171.4433	0.10	2309.6	358.59
Low Total Overlap Owner	49.94	0.07	417.05	90.82
CG Target	2.4554	0.00	5.00	2.095
CG Bidder	2.693	0.00	5.00	2.148
IP Target	2.177	1.00	3.00	2.00
IP Bidder	2.168	1.00	3.00	0.59
LnNet Income	10.28	6.80	14.76	1.813
Return on Shareholder	9.087	-232.90	51.61	38.38
Return on Asset	4.828	-52.95	28.65	10.88

Table 2 present institutional characteristics of each country based on Francis and Wang (2006). Malaysia, Hongkong and Singapore are in the first cluster characterized by large stock market, low ownership concentration, extensive outsider rights, high disclosure and strong legal enforcement. The

second and the third cluster are Japan, Taiwan, Korea, Indonesia. The second and the third cluster show markedly smaller stock market, higher ownership concentration, weaker investor protection, lower disclosure level, and weaker legal enforcement.

**Table 2** Institutional characteristics of the sample by country

Countries	Outside Investor Right	Legal enforcement	Important Equity Market	disclosure Index	cluster (1:high, 3 low)
Korea	2	5.6	11.7	62	3
Japan	4	9.2	16.8	65	2
Malaysia	4	7.7	25.3	76	1
Taiwan	3	7.4	13.3	65	2
Indonesia	2	2.9	4.7	n.a.	3
Hongkong	5	8.9	28.8	69	1
Singapore	4	8.9	28.8	78	1

### Hypothesis Examination

First of all, this study examines all hypothesis using equation model #. The results are presented in table 3. Tunneling is measured by overpayment for target firms. Consistent with hypothesis 1, overlapping ownership is positively related to the announced value of the deal. The announced value of the deal is positively affected by the number of overlapping owner ( $b = 41,071$ ;  $p < 0,001$ ). In the presence of heterogeneous ownership interests, managers are more likely to destroy deal value or overpay the target firm. Heterogeneity of owner's interest could weaken the monitoring by principals, thus pose less restraint on managerial propensity to engage in overpayment and approval of value destroying deals. Therefore, in the presence of heterogeneous ownership interests managers are more likely to engage in bigger M&A deals and more inclined to overpay the target. Therefore, the results are consistent with hypothesis 1.

**Table 3** Test Results of Tunelling

	Coefficient (t-value)
Constant	264.26 (1.358)
Total Overlap Owner	41.071*** (9.492)
Corporate Governance Target	43.945 (0.890)
Corporate Governance Bidder	-123.857** (-2.199)

Investor Protection Target	-121.807 (-1.125)
Investor Protection Bidder	63.357 (.542)
Return on Shareholder	.021 (.005)
Return on Asset	-2.451 (-.244)
Net Income	-12.547 (-.746)

**Remarks:** \*\*\*, \*\*, \* are significant at level 1%, 5%, and 10%. This table reports the estimated parameters in following regression: Deal =  $\beta_1 + \beta_2$ TotOverlap +  $\beta_3$ CG Bidder +  $\beta_4$ CG target +  $\beta_5$ Investor Protection Bidder +  $\beta_6$ Investor Protection Target +  $\beta_7$ control variables +  $\epsilon$

The main effect of bidder's corporate governance are negative significant related to deal value with the coefficient of -123.857 and its t-value of -2.199. It means that the better bidder's corporate governance is, the lower overpayment to the target is. Hypothesis 2 is supported. Corporate governance of target's firm is not significant related to deal value. Hypothesis 3 is not supported. The result inferred that corporate governance at bidder company reduce tunneling more effectively, compared to corporate governance at target firm.

The main effect of investor protection variable both in countries of target's firm and bidder's firm are not significant. Hypotesis 4 is not supported. Since the main effects of investor protection variables were insignificant, we conduct additional test with splitted sample analysis. Investors protections of target was splitted. Based on level of investor protection, the sample was split on high and low investor protection and the analysis was performed separately for both sample using equation #. When applied to bidder in high investor protection countries, overlapping owners is significantly and positively related to deal value with coefficient of 10.005, and t-value probability less than 0.001. Furthermore, corporate governance of bidder company is remain negatively and significantly related to deal value (b=-38.203, p<0.005). IP has moderating effect, support H5. Similarly, when applied to bidder in low investor protection, overlapping owners is still significantly and positively related to deal value (b=58.609, p<0.10). This evidence supports Johnson et al (2000) that tunneling occurs not only in countries with effective law enforcement but also in countries whose capital market is emerging.

**Table 4** Split Sample Analysis Based on Level of Investor Protection

	High Investor Protection	Low Investor Protection
Constant	147.63 (3.791)	-45.9 (-0.564)
Total Overlap Owner	10.005*	58.609*

	(5.396)	(4.610)
Corporate Governance Bidder	-38.209*	-319.161
	(-3.147)	(-1.769)
Return on Shareholder	-0.252	32.255
	(-0.222)	(1.034)
Return on Asset	-0.010	-52.608
	(-0.005)	(-0.664)
Net Income	-8.578*	101.850
	(-2.107)	(1.043)

**Remarks:** \*\*\*, \*\*, \* are significant at level of 1%, 5%, and 10%. This table reports the estimated parameters in following regression: Deal =  $\beta_1 + \beta_2 \text{TotOverlap} + \beta_3 \text{CG Bidder} + \beta_4 \text{CG target} + \beta_5 \text{Investor Protection Bidder} + \beta_6 \text{Investor Protection Target} + \beta_7 \text{control variables} + \varepsilon$

### Sensitivity Test: Low vs High Overlap Ownership

Based on median values of overlapping owners, the sample was splitted into high and low overlap ownership and the analysis was performed for both samples. The median values of overlapping owners was 2.6. The high overlap owners category consists of deal M&A that had total overlap owners between 3.00%–92.97%, while the low overlap owners category consists of total overlap owners between 0.01% - 2.00%.

**Table 5** Split Sample Analysis Based on Level of Total Overlap Owners

	High Overlap Owners	Low Overlap Owners
Constant	-539,214 (-,916)	272,805 (4,026)
Total Overlap Owner	70,089* (10,123)	-24,295 (-1,604)
Corporate Governance Bidder	-71,352 (-,639)	-7,413 (-,390)
Corporate Governance Target	29,807 (,353)	-5,729 (-,481)
IP Bidder	-385,255 (-1,536)	-46,887 (-1,116)
IP Target	-1,613 (-,005)	-12,543 (-,403)
Return on Shareholder	-7,077 (-,582)	1,365 (1,109)
Return on Asset	-5,526 (-,202)	-1,375 (-,633)
Net Income	54,236 (,982)	16,160 (-3,516)

**Remarks:** \*\*\*, \*\*, \* are significant at level of 1%, 5%, and 10%. This table reports the estimated parameters in following regression: Deal =  $\beta_1 + \beta_2 \text{TotOverlap} + \beta_3 \text{CG Bidder} + \beta_4 \text{CG target} + \beta_5 \text{Investor Protection Bidder} + \beta_6 \text{Investor Protection Target} + \beta_7 \text{control variables} + \varepsilon$

As expected, in the high overlap owners sample, total overlap owners are positively related to announced deal value with the coefficient of 70.089, and with probability less than 0.001. Investor protection and CG bidder were negatively related to announced deal value, but the effect is not significant. Surprisingly, however, for the low overlap owner sample the coefficient of the total overlap owners variable are negatively and insignificantly related to deal value, ( $b = -24,295$   $p > 0,05$ ). Overall results suggest that overlap owners have major control and influence in M&A deal value, especially when the overlap owners are high.

## **Findings**

The literature has attempted to measure tunneling using different proxies. Berkman, Cole and Fu (2008) examine loan guarantees issued by Chinese firms to their controlling shareholders. Chen, Jian and Xu (2008) suggest that dividend policy may also be used to tunnel cash to controlling shareholders. Gao and King (2008) use the difference between accounts receivable and accounts payable to related parties as a proxy for tunneling and show that this measure is related to corporate governance characteristics. Jian and Wong (2003) show that Chinese firms belonging to business group use related party transactions with their parents (in particular trading goods and services) as a way of manipulating earnings. Bae, Kang and Kim (2002) find that the value of Korean firms affiliated with industrial groups declines when they are asked to bail out underperforming firms in the group through rescue mergers. Bertrand, Mehta and Mullainathan (2002) use earnings shock to measure tunneling. This study enrich tunneling measurement using overpayment in M&A transaction with high overlap owner.

Prior research only has focused on principal-principal problem and principal-agent problem. This study also demonstrate about agent-principal-principal relationship that weaken the corporate governance mechanism. The presence of overlapping owner in the context of merger and acquisition could deteriorate the monitoring by principals. Conflicting interests of shareholders give opportunity for manager to make suboptimal MA deals.



overpay target. That overpayment, a transfer of wealth from owners of bidder's firm to overlapping owners, is one form of tunneling.

La Porta (1997) find that better investor protection and law enforcement improve minority shareholder's protection from expropriation and consequently reduce the private benefit of controlling shareholders. Courts in civil-law countries may tolerate accommodate more tunneling than courts in common-law countries because of: (i) a narrower application of the duty of loyalty largely to transactions with no business purpose, (ii) a higher standard proof in conflict-of-interest situations, (iii) a greater responsiveness to stakeholder interests, and (iv) a greater reliance on statutes rather than fairness when regulating self-dealing transactions. However, we conclude that tunneling occurs not only in economies with low investor protection (civil law) but also in economies with high investor protection (common law).

Two points are worth stressing. *First*, in recent years, the advanced civil-law countries, encouraged in past by a technology booming and in part by the flow of funds from foreign investors, have found it attractive to promote stock-market financing for new firms via legal reform. *Second*, for less-developed countries, including those that suffered from the Asian crisis, the failure of the legal system may be very costly precisely because they tolerate vast amounts of tunneling. Using legal reform to reduce tunneling is then a crucial element of promoting financial and economic development.

The limitations of this study are that this study focus only in M&A with overlapping owner, for future research, the sample should consist of MA with and without overlapping owners to make better inferences.

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