Abstract

This study investigates stock market reactions to firms’ announcements on related party transactions (RPT) in Indonesia. The reaction is positive when the market expects RPT to be more efficient than Non-RPT while it is negative when RPT is perceived as a way to expropriate wealth of non-controlling shareholders. The study finds no significant difference in market reaction between RPT and non-RPT announcements. Further, the study finds that RPT are more efficient with better disclosure of the transactions and tend to be perceived as a form of expropriation with higher share ownership of the boards and with the largest shareholder being foreign shareholders.

Keywords: related party transaction, market reaction, corporate governance, ownership structure, disclosure level

1. INTRODUCTION

This study aims to empirically examine stock market reactions to firms’ announcements of related party transactions (“RPT”) in an emerging country such as Indonesia and suggests that market reactions depend on the condition of external markets, the soundness of RPT regulation in the country, level of disclosure, corporate governance practice, and ownership structure.

In Indonesia, and in many countries in Asia, many listed companies have ownership structures that are concentrated (La Porta et al. 1999; Claessens et al. 2000). Majority shareholder owns a large portion of company’s outstanding shares and has controlling interest over the company. On the other hand, the level of public ownership is relatively low. Further, majority shareholder typically also controls other firms and this condition increases potential occurrence of related party transactions (“RPT”). RPT under IAS 24, is “... a transfer of resources, services, or obligations between related parties, regardless of whether a price is charged.” (IAS 24, par. 9).
RPT can have a positive or negative impact on firm performance (Gordon et al. 2004; Ryngaert and Thomas 2007). The efficient transaction hypothesis suggests that RPT can fulfill basic economic need of a company by lowering cost of transaction so that company can be more efficient. RPT has its own positive influence in the day-to-day business operation and to the general economy. Assurance to the occurrence of RPT is relatively high compared to those of third party transactions. Further, since the transaction is under common control, transaction cost of RPT is also lower than those of third party transactions. Having these reasons, it is no surprise that companies, especially those under common control, commonly conduct RPT.

On the other hand, the conflict of interest hypothesis pertains to RPT as transactions with the tendency toward expropriation of minority shareholders’ wealth. Consistent with the hypothesis, McCahery and Vermeulen (2005) conclude that even though RPT can play a positive role for companies, fraudulent and abusive RPT may exist whereby controlling shareholders’ wealth is maximized at the expense of minority shareholders. A study by Johnson et al. (2000) finds that in companies with concentrated ownership, majority shareholder can expropriate the wealth of minority shareholders in many ways. They can gain additional cash by selling assets, goods, or services to the company trough RPT at prices above the market prices; they can obtain loans with agreeable terms; they can transfer assets between companies under their control; and at worse, they can dilute the ownership of minority interest.

Consistent with these two opposing views, Cheung et al. (2006) classify RPT into: i) transactions that are a priori likely to result in expropriation of company’s minority shareholders, ii) transactions likely to benefit company’s minority shareholders, and iii) transactions that could have strategic rationales and perhaps are not expropriation. Transactions between related parties that include asset acquisitions, assets sales, equity sales, trading relationships, and cash payment are viewed as transactions with potential effect to result in an expropriation of the wealth of minority shareholders. Transactions, such as cash receipts and subsidiary relationships are viewed as the opposite: they most likely will benefit the minority shareholders. Other transactions, such as takeover offers and joint ventures, joint venture stake acquisitions, and joint venture sales are classified as strategic transactions that may not have expropriation effect.

Based on the above argument, Gordon et al. (2004) views announcements of RPT can actually result in two different market reactions: negative and positive. Negative market reaction to the announcement of RPT supports the conflict of interest hypothesis of RPT while positive reaction of RPT announcement is possible under the efficient transaction hypothesis of RPT.

Studies that examine stock price reaction to the announcement of RPT or the association between RPT and firm value mostly are conducted in developed countries. The findings of these studies in general support the expropriation view of RPT: they find a negative market reaction to the announcement of related party transactions. A study by Bae et al. (2002) in Korea empirically shows a negative reaction. In Korea, chaebols (business groups) are very dominant in the economy and some public companies belong to the chaebols, which typically are controlled by certain families. Furthermore, they find
that acquisition between companies under the same chaebol will decrease the market prices of the acquirees, which are primarily owned by minority shareholders; while evidence also shows an increase in the value of acquirors which are mostly owned by majority shareholders. In Hongkong, a study by Cheung et al. (2006) also finds a significantly negative excess return on RPT announcements relative to Non-RPT announcements. Kohlbeck and Mayhiew (2010) using US sample also find that firms engaging RPT have lower valuation than those not engaging RPT. Therefore, these studies provide direct support on the existence of expropriation of shareholders’ wealth. Shareholders’ wealth decreases significantly when companies decide to have RPTs.

One study that examines stock price reaction to RPT announcements in an emerging country (China) is Cheung et al. (2009). They find that majority of RPT announcements are followed by reduction in prices, while the reduction is not present in similar arms’ length transactions. Their finding then is consistent with findings of other studies that RPT are employed to expropriate wealth of minority shareholders. The majority of Chinese listed companies; however, is state controlled entities and they drive the results of negative stock price reaction to RPT announcements. Since state owned enterprises operate under different market and judicial setting from private enterprises, thus a similar study conducting in a developing country where state owned enterprises are not dominant is warranted.

We propose that the stock price reaction to RPT announcements in emerging countries can be different from the reaction in developed countries. In emerging countries, the external markets (financial and non-financial) are not yet properly function and thus are not reliable to conduct transactions. As a consequence, it is common business practices that companies belong to a group of companies and they conduct related party transactions. Under this condition, the benefits of RPT may outweigh the costs, resulting in a more positive stock reaction to RPT announcement than to Non-RPT announcement. This does not mean, however, that abusive RPT do not exist in emerging markets; they can even become very dominant if not accompanied by sound regulation attempting to mitigate them.

Therefore, we posit that regulation on RPT and its enforcement may also affect the direction of the price reaction: a sound regulation will reduce the possibility of abusive RPT and as such the stock price reaction to RPT announcements will tend to be non-negative. Indonesia is an appropriate country to examine our proposition since Indonesia is an emerging country and in since year 2000, a number of regulations to mitigate potentially abusive RPT have been implemented.

The Capital Market and Financial Institution Supervisory Body (Badan Pengawas Pasar Modal dan Lembaga Keuangan or Bapepam – LK) is the entity that is in charge for overseeing and monitoring the development of capital market and financial institutions in Indonesia. Between year 2000 and 2004 Bapepam – LK issued a number of rules that regulate the approval process and disclosure of RPT. Bapepam Rule No. IX.E.2 obliges all material transactions (including RPT) have to be approved by shareholders in the General Meeting of Shareholders and Rule No. IX.E.1 requires certain transactions involving conflict of interest to have approval from independent shareholders. Both rules require
extensive disclosure of the transactions. Further, Rule No. VII.G.7 provides guidance as to how listed companies should present and disclose RPT. Other regulatory body, the Indonesian Chartered Accountants, issues Indonesian Financial Accounting Standard (PSAK) No. 7 about disclosure of related parties. This standard requires listed companies to disclose related parties and transactions among them.

In Indonesia, empirical studies on RPT are rare. Studies by Masturoh (2000) and Santoso (2003) evaluate market reaction to the announcement of internal acquisitions, especially those with divergence between control and cash-flow rights. Disparity between cash-flow rights and control rights motivates controlling shareholders to make acquisitions that increase their own wealth at the expense of minority shareholders. Masturoh (2000) find a negative abnormal return for firms with internal acquisition, while Santoso (2003) find evidence of negative cumulative abnormal return for the acquirer. Data of their studies were taken before year 2000, a period in which regulation on RPT was almost nonexistent.

A later study by Utama and Utama (2010) focuses on RPT in connection with investment decisions. This study finds a weaker market reaction to the announcements of RPT compared to that of non-RPT. This evidence shows that the market views RPT as more vulnerable to the possibility of expropriation of minority shareholders’ wealth. The period of the study covers year 2000 to year 2005, while regulations relevant to RPT were issued during this period. Since it takes a while to fully implement and enforce the regulations, then the impact of the regulations on the type of RPT (i.e., efficient or abusive) may still be minimal.

Given the above explanation, this study attempts to provide evidence on market reaction to RPT announcements in Indonesia where the external market conditions are not properly functioned. In addition, given some regulations that were issued between years 2000 – 2004, the most important question is whether or not they are sufficient to address the negative impact of RPT. How about their implementation and effectiveness? Thus, the result of the study can also be used to evaluate implementation and effectiveness of RPT regulation.

We also investigate whether the type of RPT depends on RPT disclosure, corporate governance practice, and ownership structure. We propose that higher disclosure on RPT and better corporate governance practice associate more with efficient RPT rather than abusive RPT and thus the market reactions tend to be positive. Further, we suggest that the relation between ownership structure (measured by share ownership by the largest shareholder, share ownership by member of the supervisory board (board of commissioners), and foreign ownership) and market reaction can be either positive or negative. In addition, previous studies in Indonesia only cover investment decisions, while RPT involve more than investment decisions. Thus, external validity will enhance if the types of corporate announcements cover more than just investment decisions. Therefore, we broaden corporate announcements to also include non-investment decisions.

Based on the above explanation, the objectives of the study are to investigate stock market reactions to firms’ announcements of RPT in Indonesia and if the reaction depends on the level of RPT disclosure, corporate governance practice, and ownership structure.
Our study finds that in general, stock price reactions to RPT announcements are not significantly different from the reactions to non-RPT announcements, suggesting that overall; the impact of efficient RPT is as strong as that of abusive RPT. Our finding supports the contention that in a country where external markets are not efficient, abusive RPT do not necessarily dominate efficient RPT. In addition, our finding suggests that the inception of a number of regulations on RPT in Indonesia since year 2000 reduces the prevalence of abusive RPT. Further, we find that better disclosure of RPT results in a more positive price reaction of RPT than Non-RPT announcement while contrary to our expectation, better corporate governance practice associates with a lower price reaction of RPT than Non-RPT announcement. We document that firms whose controlling shareholders are foreign entities or firms with higher ownership by members of the board of commissioners tend to generate lower price reaction of RPT than that of Non-RPT announcement. Finally, we find that share ownership by the largest shareholder does not have any effect on the market reaction of RPT announcement.

The remainder of the paper proceeds as follows: Section 2 evaluates the regulation of RPT in Indonesia. Section 3 describes hypothesis development and research design. Section 4 provides results and discussion while the last section provides conclusion.

2. RPT REGULATIONS IN INDONESIA

To mitigate expropriation and negative impact of RPT, the capital market regulatory body in Indonesia, Bapepam-LK, issues several regulations to protect the interest of minority and other shareholders. In addition, the recently enacted company law (Undang-Undang No. 40 Perseroan Terbatas in year 2007) also addresses the approval process of conflict-of-interest transaction. As explained follow, the regulations include disclosures on RPT, approval of RPT and material transactions, shareholders’ redress and rules on corporate governance.

2.1. Disclosure on RPT

Starting in year 2000, public companies are required by Bapepam-LK (Bapepam Rule VIII.G.7) to disclose information on RPT in audited financial statements. Information that should be disclosed includes:

1. Assets, liabilities, sales, and purchases that involve RPT and their percentage to total assets, total liabilities, total sales, and total purchases

2. If transaction amount or ending balance of the above-mentioned account is more than one billion rupiahs (approximately US $ 110,000), the amounts or balances should be disclosed separately and the name and relation with the related party should be mentioned.

---

1 For a more in-depth analysis with Indonesia’s experience with managing RPT, please refer to Utama (2008).
3. Pricing policies and transaction requirements, and information whether or not the pricing policies and transaction requirements are similar with those of arm-length transactions.

4. Reasons and assumptions on the creation of allowance for doubtful account to RPT receivables.

Starting in year 2008, public companies that conduct related party transactions are required to publicly disclose regarding the events not later than 2 (two) days after the event occurs (Bapepam Rule IX.E.1 regarding affiliated transaction and conflict-of-interest transaction\(^2\)). In addition, transaction (including RPT) that involves conflict of interest should gain approval from independent shareholders before it can be done. Information mandatory to be disclosed are quite elaborate, among them are as follow. A firm has to describe the nature of the transaction, such as the value of transaction, the identity of the counter party and why it meets the definition of related party. In addition, the firm has to appoint an independent external party to evaluate the fairness of the transactions. Justification of the transaction has to be provided by comparing it with a transaction with an external independent party. There also has to be a statement from commissioners and directors that all material information is disclosed and it is not misleading.

Before year 2008, disclosure of RPT was subject to Bapepam Rule X.K.1 regarding disclosure of information that must immediately be made public. The rule requires public companies to publicly disclose any material information regarding events that may affect the price of securities or investors’ decisions, not later than 2 (two) days after the event occurs. The events may include RPT and among others include merger/acquisition, stock split/dividend, a significant new product/innovation, a significant change in management etc. The rule, however, does not state what kind of information that have to be disclosed to the public, so it is up to the companies to determine the level of disclosure regarding the events. Bapepam Rule IX.E.2 issued in year 2001 regarding material transaction requires that if a company plans to have a material transaction, it has to publicly announce the plan no later than 28 days before Shareholders General Meeting that will approve/reject the plan\(^3\). A related party transaction that qualifies as material transaction then is subject to this rule. Information to be disclosed is similar to the RPT disclosure according to Bapepam Rule IX.E.1. Firms have to appoint an independent external party to evaluate and provide opinion on the feasibility of the transaction and the summarized report of the independent party has to be disclosed. There also has to be a statement from commissioners and directors that all material information is disclosed and they are not misleading. Companies also have to

---

\(^2\) The rule originally was issued in year 2001 and revised in year 2008. The old rule covered only conflict-of-interest transaction that has to be disclosed and approved by independent shareholder. The new rule added the requirement to extensively disclose affiliated/related party transaction.

\(^3\) Material transaction means any purchase, sale, or shares participation and/or any purchase, sale, transfer, exchange of assets or business segment with a total value equal or greater than one of the following: a. 10% of a company’s revenue, or 20% of a company’s equity (Bapepam Rule IX.E.2 article 1).
provide a statement that the transaction is not a conflict-of-interest transaction involving controlling shareholder, commissioners, or directors.

2.2. Approval on RPT

Approval on RPT can be conducted by the Board of Directors or by shareholders. The new company law in 2007 (Undang-Undang No. 40 Perseroan Terbatas) requires directors/commissioners that are involved in conflict-of-interest transaction not to decide/approve the transaction. The approval should come from other directors/commissioners who are not involved with the transaction. If all directors/commissioners are involved, then shareholders should appoint an independent party to make decision regarding the transaction. Before the law was enacted, there was no rule addressing the approval process of conflict-of-interest transaction by the board.

As explained earlier, Bapepam Rule IX.E.2 requires material transactions to be approved by shareholders. Since share ownership of most listed companies in Indonesia is concentrated in the hand of controlling shareholder, then if the controlling shareholder approves the transaction, the transaction will be approved even though other shareholders may not approve the transaction. Thus, this rule may not be effective in mitigating transaction that may not be the best interest of the company or non-controlling shareholder.

Some conflict-of-interest transactions require approval from independent shareholders (Bapepam Rule IX.E.1); however, there are some exemptions from the requirement. As a result, only few RPT obtained approval from independent shareholders: between years 2001–2007 there were approximately 70 transactions obtained independent shareholders, which were relatively small compared to the size of RPT transactions in Indonesia.

2.3. Shareholders’ Redress and Other Regulations

The company law and the capital market law enables minority shareholders to file lawsuit against director/commissioner/company for a loss caused by negligence or intentional fraud. Directors/ Commissioners /Controlling shareholders may also be personally liable if they abuse their power to their advantage at the expense of other parties such as minority shareholders.

Bapepam-LK and the Indonesian Stock Exchange (IDX) issue some regulations not directly related to RPT but that increase oversight of companies by independent external parties. In year 2000, IDX required listed companies to have at least 30% of members of the supervisory board or board of commissioners to be independent commissioners. Since they have no relation with controlling shareholders and any of the members of the supervisory board and the board of directors, they are expected to provide independent oversight of companies’ affairs, including related party transactions. In year 2004 Bapepam – LK issued Bapepam Rule IX.1.5 that obliges public companies to establish audit committee. The audit committee has to be chaired by the independent commissioners and at least two members are independent external parties. The primary role of the committee is to assist the board of commissioners in monitoring a company.
From the above explanation, we conclude that there have been some progresses in regulation attempting to reduce the potential negative impact of RPT. The disclosure requirements are highly extensive and in term of the approval process, we note that Indonesia is the only country in Asia that requires approval from independent shareholders in the case of RPT with conflict of interest. However, before the enactment of the new company law in year 2007, most RPT did not have to go through approval process by parties independent of the transactions. As for shareholders’ redress, in practice, it is very rare for shareholders to file lawsuit because the judicial process is inefficient, lengthy, and not impartial. Indonesia does not have special body or court that can put on trial a company that is proven to violate the regulations. From this point of view, Indonesia is still behind other countries in Asia such as Malaysia, Taiwan, Thailand, and Vietnam.

Given these strengths and weaknesses of the regulation, it is an empirical issue to examine if regulations enacted between years 2000 and 2004 are effective in reducing potentially abusive RPT.

3. HYPOTHESES DEVELOPMENT AND RESEARCH DESIGN

3.1. Hypotheses Development

Consistent with previous studies (for example Cheung et al. 2006, Utama and Utama 2010), we investigate stock price reaction to RPT announcements by comparing the relative price reaction between RPT to non-RPT announcements. Stock price reaction is assumed to unbiasedly reflect market expectation of the impact of the announcement to firm value. We also perform a regression analysis that examines whether the relation between RPT and market reaction is influenced by corporate governance practice, RPT disclosure, and ownership structure. The following section discusses the development of hypotheses of the study.

As discussed earlier, RPT has two contradictory natures. It can be viewed as a transaction with expropriation potentials resulting in relatively a negative market reaction, but it can also be viewed as an efficient transaction that can lower costs, resulting in a relatively positive market reaction.

As Gordon et al. (2004) suggests RPT can fulfill basic economic need of a company by lowering cost of transaction so that company can be more efficient. In emerging market like Indonesia, the external markets often are not functioned properly, in addition, if a company has a dispute with an external transacted party, it cannot rely on the judicial process to settle the dispute fairly. La Porta et al. (1998) shows that the legal environment in Indonesia is relatively low compared to other Asian countries. Indonesia especially is scored low in its judicial efficiency, rule of law, and corruption. Under this condition, firms resort to transact with companies that they trust, i.e., related parties. Consistent with this view, Stein (1997) suggests that when external financial markets are inefficient, internal financial markets can provide more efficient capital allocation. Claessen et al. (2006) indeed empirically find that financially constrained firms benefit from group affiliation.
On the other hand, as found by Cheung et al. (2009), Utama and Utama (2010), Santoso (2003), and Masuroh (2000), stock price reaction tends to be more negative for RPT than non-RPT. Their findings imply that RPT tends to detriment non-controlling shareholders due to expropriation incentive of the controlling shareholder.

The effectiveness of regulation may have impact on the reaction. As discussed in the previous section, in Indonesia, RPT, especially those that are relatively large, are subject to extensive public disclosure and in some cases approval by shareholders/independent shareholders. In addition, the oversight of the transaction is conducted not only by the regulator (Bapepam-LK) but also by the public. If the rules are properly enforced and oversight by the regulator as well as the public is effective, then RPT subject to this scrutiny tends to be efficient rather than abusive. Because of this two opposing views, the hypothesis is formulated as follow:

**H1: Ceteris paribus, Cumulative abnormal return (CAR) of RPT announcements differs from CAR of Non-RPT announcements.**

The study expects that the relation between RPT and stock price reaction is moderated by the practice of corporate governance, the level of disclosure in the announcement, and the ownership structure.

A number of studies find that better corporate governance practice associates with higher firm value (e.g., Lemmons and Lins 2003; Baek et al. 2004; Black et al. 2006); however, to our knowledge so far no study has investigated the role corporate governance in moderating the relation between RPT and stock price reaction. Since good corporate governance practice enhances supervision and monitoring of RPT, then, RPT that actually occurs more likely is RPT that increases effectiveness and efficiency of the firm. Therefore, better CG practice should result in more positive market reaction toward RPT relative to Non-RPT announcement.

**H2: As corporate governance practice improves, CAR of RPT announcements becomes more positive than CAR of Non-RPT announcements.**

Higher disclosure in the announcement of transaction signals a company’s good intention to provide information and assure sufficient disclosure to shareholders and other stakeholders. If the intention of the transaction is for efficiency reason, then there is nothing to hide, with the consequence of higher disclosure level. Consistent with this view, Cheung et al. (2009) find that RPT representing tunneling which is considered abusive have less information disclosure than RPT representing propping which is considered beneficial to a firm. Therefore, higher disclosure of transaction should result in a more positive market reaction toward RPT relative to Non-RPT announcement.

**H3: As the disclosure level of transaction increases, CAR of RPT announcement becomes more positive than CAR of Non-RPT announcement.**

Ownership structure is represented by three variables: percentage ownership by the largest shareholder, ownership by members of the supervisory board, and foreign shareholder as the largest shareholder.
A study by Capulong et al. (2001) states that in companies with highly concentrated ownership, majority shareholders have a significant role in supervising the management and this will be positively responded by the market. But as the ownership gets more concentrated, it will increase the ease of the majority shareholder to authorize an RPT. This condition can have dual effect to market reaction. Claessens et al. (2002) suggests that concentrated ownership can have two opposite impacts on firm value: a higher ownership by the largest or controlling shareholder implies more investment in the firm and higher share of profit or loss generated by the firm. Thus, higher ownership results in higher controlling shareholder’s share of loss due to expropriation, making it less likely for the shareholder to conduct an abusive RPT. This cash-flow right of the controlling shareholder create incentive to maximize firm value (i.e., the incentive or alignment effect), which among others also includes conducting efficient RPT. On the other hand, higher ownership also generates higher control right. With the use of pyramid ownership structure, the controlling shareholder can have a higher control right than cash-flow right. Higher divergence between the two rights creates incentive for the controlling shareholder to expropriate wealth of the firm (among others by conducting abusive RPT) and thus cause loss to non-controlling shareholders (i.e. the entrenchment effect). Because, the effect of proportion of ownership by the largest shareholder can be twofold then we make no prediction with the direction of the impact.

**H4: Share ownership by the largest shareholder affects the difference between CAR of RPT announcement and CAR of Non-RPT announcement.**

To assure that a listed firm is under the control of the largest shareholder, the largest shareholder typically places himself/herself and his/her relatives/affiliates as members of the supervisory board. The members may also own equity shares in the company and also have the same alignment or entrenchment motivation as the controlling shareholder has. The distinction is that since they sit in the board, then they have more direct control of company affairs than a controlling shareholder and his/her affiliates who does not sit in the board. The hypothesis then is stated as follow:

**H5: Share ownership by members of the supervisory board affects the difference between CAR of RPT announcement and CAR of Non-RPT announcement.**

Assuming foreign shareholders are more sophisticated than domestic shareholders in term of their monitoring ability (i.e., the monitoring effect), we expect that the existence of foreign investor as the largest shareholder in a company will increase monitoring and supervision on RPT so it is more likely that RPT occurring is the one that increases the efficiency of company’s operation. In line with this view, Cheung et al. (2009) documents that firms subject to support by the controlling shareholders tend to have foreign shareholders compared to firms that are subject to tunneling. Under this view, stock price reaction to RPT announcement tends to be relatively positive.

On the other hand, a foreign company as a subsidiary may have a related party transaction with its parent company as a mean of transfer pricing to exploit market imperfections (Leitch and Barret 1992) or to respond to different business environments across countries (Chan and Lo 2004). Using foreign investment firms in China as samples
of the study, Chan and Lo (2004) find that foreign owned firms tend to use market-based transfer pricing methods to transact with their parents when they perceive the interests of local partners or maintaining a good relationship with host government are crucial. On the other hand, these companies tend to use cost-based transfer pricing methods when they perceive high probability of foreign exchange control. Thus, uncertain business environments induce companies to adopt non-market based pricing method. Cost-based methods are more arbitrary than market-based methods and thus provide more opportunities for multinational companies to pursue their objectives which may not always beneficial to the subsidiaries/local firms. Under this perspective, RPT can be detrimental to non-controlling shareholders if the motives for conducting transfer pricing result in lower profit of the company (i.e., the transfer pricing effect). Thus, since the impact of majority ownership by foreign investors can be twofold, the hypothesis is stated as follow:

H6: Ownership by foreign shareholders affects the difference between CAR of RPT announcement and CAR of Non-RPT announcement.

3.2. Research Design
3.2.1. Sample Selection
Unit analysis in this study is listed companies conducting corporate actions during the period of 2005 – 2007. We choose year 2005 as the beginning period since rules relevant to RPT (with the exception of the company law that was issued in year 2007) were enacted before year 2005 and thus they had been implemented by year 2005. Corporate action data is primarily obtained from the website of the Indonesian Stock Exchange (IDX), data is also gathered from Bisnis Indonesia newspaper. Criteria for sample selection are:
3. Corporate action can be identified as RPT or non-RPT.
4. Available share prices during the event windows.
5. Available financial statements and annual reports.
6. Available ownership data from financial statements.

IDX classifies corporate actions into several types so we covers types of corporate actions that have the possibility for RPT, i.e. Annual Shareholders Meetings (ASM), result of the ASM, Issuance of shares without preemptive rights, Disclosure on issuance of shares without preemptive rights, Short prospectus on issuance of shares, Tender offer, Merger, and Material Transaction.

3.2.2. Measurement of Variables
Market reaction is measured by Cumulative Abnormal Return (CAR) around announcement dates for 7 days event window (day -1 to day +5) to assure that the reaction is covered in the event window. Market adjusted return is used in calculating the daily abnormal return. We do not employ market model to calculate CAR since a large number of stocks traded at IDX are not liquid so betas for most of the firms are not reliable
measure of systematic risk. The distribution of CAR is highly skewed with several observations to the extreme right of the distribution. Thus, the results of the regression may be highly influenced by these observations. To reduce the skewness and to lower the sensitivity of the results to extreme observations, we transform the dependent variable with logarithmic transformation and employ the log of CAR as the dependent variable\(^4\).

Corporate announcements are classified into those of RPT and those of non-RPT based on the disclosure in the announcements. Transactions stated as ‘related party’, ‘affiliated’, or ‘conflict of interest’ are classified as RPT. A dummy variable (DRPT) takes the value of one if the announcement involves RPT, else zero.

Corporate governance practice is measured by Corporate Governance (CG) Index developed by the Indonesian Institute for Corporate Directorship (IICD). The score is based on an instrument\(^5\) covering five components of CG principles suggested by the Organization of Economic Cooperation and Development (OECD, 2004), namely Protection of Shareholders Rights, Equitable Treatment of Shareholders, Role of Stakeholders, Disclosure and Transparency, and Board Responsibilities. The instrument consists of 117 items. Each item is rated ‘poor’ (scored one), ‘fair’ (scored two), and ‘good’ (scored three) depending on whether the item is properly practiced based on information publicly disclosed in 2005. The total CG score/index is calculated as a weighted average of the score of each component and is expressed as a percentage of the maximum score.

RPT disclosure is represented by the availability of value of transaction in the announcement. A dummy variable (DDISCL) takes the value of one if the announcement provides information on the value of the transaction, else zero. We choose value of transaction as a measure of RPT disclosure since disclosing transaction value enables public shareholders to assess the fairness of the transaction. Thus, value of transaction provides crucial information to the public. Ownership structure is measured by the percentage of largest shareholder’s share ownership and the percentage of supervisory board’s share ownership. In addition a dummy variable (DFOR) takes the value of one if the largest shareholder is a foreign investor, else zero. As a control variable, the study employs company size, measured by the log of firm’s equity market capitalization. Firm size is added as a control variable because according to the finding of Fama and French (1992), size has a negative relation with stock return. The existence of this negative relationship subsequently is interpreted that size also reflects a company’s risk.

3.2.3. Regression Model

The empirical model to test the hypothesis is as follow. To test the first hypothesis we employ the following regression model (Model 1). To control for heteroscedasticity, all regressions are performed using White-heteroscedasticity consistent covariance matrix.

---

\(^4\) Since some CAR are negative, then for all CAR we add a constant value that is larger than the minimum value of CAR so they become positive. Then, we transform them with logarithmic transformation.

\(^5\) The instrument was originally developed by Thailand Institute of Directors and has been used by other Institute of Directors in East Asia region (i.e., China, Indonesia, Hong Kong, Philippines) to generate corporate governance score for listed firms in these countries.
\[ \text{LCAR}_i = b_0 + b_1 \text{DRPT}_i + b_2 \text{LOGMKT}_i + e_i \] 

(1)

where \( i \) is for corporate announcement \( i \),

\begin{align*}
\text{CAR} & = \text{Log of Cumulative Abnormal Return}, \\
\text{DRPT} & = 1 \text{ if RPT, else zero}, \\
\text{LOGMKT} & = \text{Log of Equity Market Capitalization}, \\
e & = \text{residual}.
\end{align*}

Based on the first hypothesis, \( b_1 \neq 0 \). A finding of \( b_1 \) greater than zero is consistent with the efficient motive being the dominant motive while a finding of \( b_1 \) less than zero is in line with the expropriation motive being the dominant one. If \( b_1 \) is not significantly different from zero, then the impact of the efficient motive is as strong as the impact of the expropriation motive.

To investigate the effect of disclosure, corporate governance practice, and ownership structure on the relation between RPT and CAR, we employ the following regression model (Model 2).

\[ \text{LCAR}_i = b_0 + b_1 \text{DRPT}_i + b_2 \text{CGI}_i + b_3 \text{DDISCL}_i + b_4 \text{PROP}_i + b_5 \text{BOC}_i + b_6 \text{DFOR}_i + \\
+ b_7 \text{CGRPT}_i + b_8 \text{DDISCLRPT}_i + b_9 \text{PROPRPT}_i + b_{10} \text{BOCRPT}_i + b_{11} \text{DFORRPT}_i + \\
+ b_{12} \text{LOGMKT}_i + e_i \] 

(2)

where \( i \) is for corporate announcement \( i \),

\begin{align*}
\text{CGI} & = \text{CG Score}, \\
\text{BOC} & = \text{ownership interest of members of the board of commissioners}, \\
\text{DDISCL} & = \text{disclosure of the amount/value of transaction (DDISCL = 1 if value of transaction is disclosed, else zero)}, \\
\text{PROP} & = \text{ownership interest of the largest shareholder}, \\
\text{DFOR} & = \text{foreign ownership (DFOR = 1 if the largest shareholder is a foreign entity/investor, else zero)}, \\
\text{CGRPT} & = \text{interaction of CG and DRPT}, \\
\text{BOCRPT} & = \text{interaction of BOC and DRPT}, \\
\text{PROPRPT} & = \text{interaction of PROP and DRPT}, \\
\text{DFORRPT} & = \text{interaction of DFOR and DRPT}, \\
\text{DDISCLRPT} & = \text{interaction of DDISCL and DRPT}, \\
e & = \text{residual}.
\end{align*}

Based on the hypotheses, the coefficients for interaction variables are expected as follow: \( b_7 > 0, b_8 > 0, b_9 \neq 0, b_{10} \neq 0, \) and \( b_{11} \neq 0 \). We also include CGI, BOC, DDISCL, PROP and DFOR as independent variables to control for possible direct effect of these variables to LCAR.
4. RESULTS AND DISCUSSION

4.1. Description of Size and Disclosure of RPT in Indonesia

To measure the relative size of RPT, we employ two measures: a. sum of assets and liabilities arising from RPT (RPT assets and RPT liabilities) of listed companies at the Indonesian Stock Exchange (IDX) divided by stockholders’ equity of these companies (Equity), b. sum of sales and expenses arising from RPT (RPT sales and RPT expenses) of listed companies at IDX divided by sum of stockholders’ equity of these companies. As explained earlier, listed companies have to disclose assets, liabilities, sales, and expenses resulting from RPT. Analysis on financial statements of listed companies during 2005 – 2007 shows that transactions involving related parties are quite substantial relative to the book value of equity (see Table 1). Based on the above statistics, we conclude that RPT is relatively common among listed companies. This finding also implies that RPT has a large impact on the profitability and value of the firm. Considering that listed companies in Indonesia mostly have highly concentrated ownership, this result provides evidence that the degree of concentration of ownership structures affects the size of RPT.

With regard to firms’ compliance to disclosure requirement, the study analyzes the level of RPT disclosure in the notes to financial statements based on the disclosure requirement by Bapepam-LK explained earlier. There are 10 items to be disclosed and each item is checked whether it is disclosed or not. A score of one is given if it is disclosed, zero otherwise. Thus, if firms disclose all items, the maximum score will be ten (100%). The average RPT disclosure for year 2005, 2006, and 2007 respectively is 79.9%, 78.9%, and 81.2%. The results indicate that the level of compliance to RPT disclosure requirement is relatively good. However, not all disclosure items are complied. Majority of the firms (more than 50%) did not disclose pricing policies and transaction requirements of RPT, while the information is crucial for investors to evaluate the fairness of the transactions.

4.2. Sample

From a total of 2,449 corporate actions in 2005 – 2007, only 716 corporate actions fulfill the requirements of RPT and non-RPT identifications stated earlier. After that, the selected samples are further analyzed based on redundancy (same event announced several times). This second filtering provides us with 177 RPT samples and 190 non-RPT samples. After data availability consideration, we gathered a final sample of 151 corporate actions, 71 of which are RPTs and the rest (80 observations) are non-RPT.

4.3. Empirical Results

The table 2 provides statistics descriptive of the dependent and independent variables. CAR and Firm size (MKTCAP) is presented before the log transformation and is expressed in billion rupiah.

The average CAR is close to zero and is not significantly different from zero. Thus, on average the market does not react to corporate announcements. The occurrence of RPT (DRPT) has a mean value of 0.470; from 71 out of the total sample of 151. This
indicates that almost half of corporate actions are RPTs. Considering the nature of ownership structure of companies in Indonesia, the result is not surprising. The average CG practice is 62.7%, indicating that CG practice in Indonesia is still relatively inadequate. For the occurrence of disclosure of corporate action (DDISCL), the mean value is 0.430; with 65 companies out of the total sample 151 provide disclosure of value of transactions on corporate action. Value of transaction is the key information needed by investors to evaluate the impact of the transaction to firm value, thus, this result shows an inadequate transparency of many listed firms in IDX.

The proportion of largest shareholder ownership (PROP) has a mean value of 50.2%, with minimum and maximum amount of 7.4% and 94.9%, respectively. This result is, again, not surprising, and showing that the tendency of ownership structure of listed firms in Indonesia leans toward concentrated ownership. Ownership interest of the BOC averages around 33.4% with minimum and maximum amount of 0 and 85.7%, respectively. This relative high figure indicates that controlling shareholders sit themselves and/or their affiliates in the supervisory board. The table also indicates that from total sample 151, 58 of them have a foreign majority ownership. The average market capitalization of the sampled firms is 3.6 trillion rupiah (approximately USD 400 million) while the median is much smaller (673 billion rupiah or USD 75 million), suggesting a highly skewed distribution of this variable. These figures are higher than the figures for the population of listed companies at the IDX and imply that firms that conduct corporate announcements tend to be larger firms.

Table 3 provides correlation analysis among variables. All independent variables do not have significant correlation with CAR. CGI has a positive correlation with DRPT, a negative correlation with BOC, and a highly strong positive correlation with LOGMKT. The positive correlation with DRPT is quite a surprise; however, if majority of RPTs are for efficient purpose, then the positive correlation should be expected. The positive correlation between CGI and LOGMKT is as expected since external pressures to practice good corporate governance increases as firms grow larger. Further, large firms face more agency conflicts and as such, elect to have better governance practice to control such conflicts. Proportion of ownership by the largest shareholder (PROP) has a positive correlation with DRPT, suggesting that higher ownership makes it easier for majority shareholder to conduct RPT. As expected, PROP also has a positive correlation with BOC.

Table 4 provides the regression result of equation (1). Study by Gordon et al. (2004) states two hypotheses for the nature of RPT. The first hypothesis, the conflict of interest hypotheses, claims that RPT is a transaction with tendency toward expropriation of minority shareholders’ wealth. The second hypothesis, the efficient transaction hypothesis, claims that RPT can fulfill basic economic needs of corporation with its ability to decrease cost of transactions. Hypothesis of this study is RPT announcement can have a positive or negative market reaction

Result from table 4 shows that the coefficient of DRPT is not significantly different from zero, indicating that stock price reaction to RPT announcement is not significantly different from the reaction to Non-RPT announcement. We conclude that the efficient effect is as strong as the expropriation effect such that they offset each other,
resulting in insignificant coefficient of DRPT. The finding is contradictory to the findings of Utama and Utama (2010) and Masuroh (2000) who find a relatively more negative reaction toward RPT than Non-RPT. There are several plausible reasons for these contradictory results:

1. The period of studies of Masuroh (2000) and Utama and Utama (2010) covers earlier years (before 2005) than the current study. As mentioned earlier, most regulations relevant to RPT were issued between years 2000 – 2004 and it may take a while to implement and effectively enforce the regulation. Thus, the finding supports the contention that regulations on RPT and their enforcement reduce the occurrence of abusive RPT. Public scrutiny on the transactions also helps in reducing the possibility of conducting abusive RPT.

2. This study covers broader corporate action than their studies, which are limited only to investment decisions. This may imply that non-investment decisions are less likely to be employed as means to expropriate than investment decisions.

The finding of the study is also not consistent with the finding of Cheung et al. (2006) in Hong Kong and Cheung et al. (2009) in China since they find that stock price reaction to RPT announcement is lower than Non-RPT announcement. As discussed earlier, one possible explanation is that Indonesia is a developing country in which external markets (financial and non-financial) are not efficiently functioned and legal protection is relatively poor, while Hong Kong is a developed country in which both external markets and legal protection are efficient and reliable. These differences signify that benefits of RPT are much stronger in Indonesia than those in Hong Kong, resulting in a relatively no negative reaction to RPT announcement in Indonesia.

Unlike China, in Indonesia most listed companies are not state owned enterprises (SOE) and this may explain the inconsistent results between our study and their study. SOE are typically protected by the state/government so they are not as exposed as private enterprises to the uncertainty in judicial process and external markets. Thus, the benefits of conducting RPT for SOE may not be as strong as for private enterprises and therefore, most RPT conducted by SOE may be for tunneling reason.

Our finding, however, cannot be generalized to related party transactions that are not subject to disclosure requirement to the public for the following reason. Our samples are corporate RPT and Non-RPT announcements that, according to Bapepam-LK rules, have to be publicly announced and disclosed and they are relatively large RPT. Smaller RPT are not disclosed and since they are not subject to regulator’s as well as public scrutiny, these RPT may not exhibit the same pattern as large RPT.

Table 5 provides the results of the regression of equation (2) that tests if the type of RPT (efficient or abusive) depends on disclosure, corporate governance practice, and ownership structure. Table 5 provides evidence of a positive and significant relation between DDISCLRPT and LCAR, supporting hypothesis 3. Disclosing the value of transaction indicates management’s good intention of transparency toward shareholders.

---

6 The percentage of publicly listed companies in Indonesia whose controlling shareholders are the government is less than five percent.
and other stakeholders. Disclosing the value of transaction also reduces asymmetric information regarding the transaction. Therefore, market reaction to RPT announcements that disclose value of transactions is higher than that does not disclose the value. The finding also implies that efficient RPT tend to be better disclosed than abusive RPT.

Contrary to hypothesis 2, the study finds a significantly negative coefficient of CGRPT, implying that higher corporate governance scores lower stock price reactions of RPT relative to Non-RPT transactions. As suggested by Gordon et al. (2004), if RPT mostly are efficient transactions, there is no need to increase oversight (i.e., better governance) and as a result, corporate governance plays no role in controlling RPT. Our finding, however, is not that corporate governance plays no role; instead, it lowers the difference between CAR of RPT and Non-RPT.

One possible explanation is that firms that incur potentially high agency problems (such as potentially abusive related party transactions) choose to enhance their corporate governance practices to reduce the agency problems and to provide positive signal to the public. Thus, these firms that are perceived by the market to conduct potentially abusive RPT attempt to reduce that perception by practicing good governance. By practicing good governance, these firms still incur relatively negative price reaction on their RPT, but this negative price reaction would be even lower if these firms did not practice good governance. This explanation thus implies that corporate governance practice is endogeneously determined.

To examine this possible explanation, we add an interaction between RPT and firm size (LOGMKT) as an independent variable to the regression model in equation (2). As firms become larger, external parties (i.e., principals) that interact with the firms become more diverse and thus, potential agency conflicts between these parties and the agent (the management team and/or controlling shareholder) becomes more severe. To reduce these conflicts, firms resort to enhance the oversight mechanism by improving their governance practice. By adding the interaction between RPT and firm size (LMKTRPT) as an independent variable, we expect the magnitude of the negative coefficient and the significant level of CGRPT will decrease if the above explanation indeed holds.

Table 6 provides the results of the regression with the addition of LMKTRPT to equation (2). The magnitude of the negative coefficient of CGRPT and its significant level are lower than those in Table 5 although it is still marginally significant. Thus, we conclude that the negative coefficient of CGRPT is partly due to the positive association between corporate governance practice and firm size, which proxies for potential agency conflicts. This association, however, does not fully explain the negative coefficient of CGRPT.

The results with regard to ownership structure variables are as follow. The coefficient of PROPRPT is not significant, suggesting that proportion of ownership by the

---

7 This line of thinking is consistent with a study by Bushman et al. (2004) that suggests and finds that firms that have high information uncertainty/asymmetry elect to have better governance practice than those that do not face such asymmetry.

8 The highly positive correlation between corporate governance practice (CGI) and firm size (LOGMKT) as shown in Table 3 supports this contention.
largest shareholder does not have any influence on type of RPT, i.e., efficiency or expropriation. This finding implies that the alignment and the entrenchment effects offset each other such that this variable is not significant. The coefficient of BOCRPT, however, is marginally negative. This finding suggests that with an increased ownership by members of BOC, the entrenchment effect becomes more dominant than the alignment effect. This result is different from the PROP interaction variable that measures share ownership by the largest shareholder. The explanation is that higher ownership of the largest shareholder may not necessarily result in stronger control of the firm if the shareholder does not put him/herself and/or his/her affiliates in the supervisory board. On the other hand, commissioners directly provide oversight to the firm and thus can more easily arrange RPT to their personal benefits.

The coefficient of DFORRPT is marginally significant and is negative, suggesting that the transfer pricing effect dominates the monitoring effect. Thus, the evidence suggests that foreign-controlled firms utilize RPT to conduct transfer pricing, which may not be beneficial to the local firms, and thus to the non-controlling shareholders.

4.4. Sensitivity Analysis

The event window our study is 7 days, from day -1 to day +5 relative to the announcement date (day 0). Given the relatively weak enforcement of insider trading rule in Indonesia, it is possible that information of the announcement is leakage before the announcement. To control for this information leakage, we extend the event window to 11 days, from day -5 to day +5. The drawback of extending the event window, however, is that other firm specific events are more likely to occur and these may confound the price reaction, lowering the power of the test.

The results for the regression of Model 1 are similar with the results in Table 4 (See Table 7), although the coefficient of DRPT is nearly significant at 90% confidence level. Interestingly, if we lower the confidence level to 89%, the coefficient of DRPT becomes significantly positive, suggesting that overall, RPT tend to be for efficiency reason.

The results for the regression of Model 2 can be seen Table 8. In general, the results are consistent with and a bit stronger than the results in the regression in Table 5: the coefficient of DDISCRPT is significantly positive at 5% level, DFORRPT and CGRPT are significantly negative at 5% level and the coefficient of BOCRPT is marginally negative. Thus, the results are not sensitive to the length of the event window of the study.

For the regression with interaction variables (Model 2), we check for possible multicollinearity by looking at the Variance Inflation Factor (VIF) of the independent variables. VIFs of some variables and their interaction variables (CG, BOC, PROP, CGRPT, BOCRPT, and PROPRPT) are higher than 10, suggesting multicollinearities among independent variables. Since multicollinearity problem may result in coefficients that are unreliable, then to mitigate this problem, we transform CG, BOC, and PROP by deducting the original values with the mean of each variable. The transformed variables
then are interacted with RPT to obtain the interaction variables. After the transformation, VIFs of these variables drop to below 10, thus we run the regression of model 2 with the transformed variable. The results are qualitatively similar to the results with untransformed variables (Table 5). The only different is the coefficient of DRPT which becomes not significant.

5. CONCLUSION

With regard to regulations on RPT in Indonesia, we conclude that in general the regulations are relatively adequate. The regulations include:

1. Listed companies in Indonesia are obliged to disclose detail RPT information in Financial Statements.
2. RPT with conflict of interest should gain approval from parties not involved with the transactions.
3. Some large RPT require approval from shareholders as well as are subject to extensive public disclosure.
4. Directors/Commissioners/Controlling Shareholders can be held personally liable for causing loss to firms/minority shareholders as a result of RPT transaction.
5. Under certain condition, minority shareholders may file lawsuit against directors/commissioners/controlling shareholders for any wrongdoing.

However, Indonesia still lacks legal empowerment against violation of RPT and CG regulation.

The study finds that in general, market views RPT as not significantly different from non-RPT in term of its impact on firm value. The finding implies that in emerging countries like Indonesia, RPT may have to be conducted given costly external markets and inefficient judicial process, and this may offset the potential misuse of RPT for wealth expropriation purpose. Further, the finding suggests that oversight by the regulator and the public may also play some role in reducing the occurrence of abusive RPT. We also find that firms providing disclosure on the value of the RPT transaction tend to be perceived by the market as efficient RPT, as reflected by higher stock price reaction for RPT that provides disclosure on the value of the transaction than RPT that does not provide such disclosure. On the other hand, contrary to the expectation, we find that better CG practice tends to associate with abusive RPT. One possible explanation is that corporate governance practice is endogenously determined to reduce agency costs of firms with potentially high agency conflicts.

We find that percentage of share ownership by the largest shareholder does not have any influence on the type of RPT, suggesting that the alignment and the entrenchment effect of concentrated ownership cancel each other. On the other hand, we find evidence that higher ownership by members of the supervisory board marginally associates with more abusive RPT. Finally, we document (albeit weak) that if the largest

---

9 For space consideration, the results are not provided but can be requested from the authors.
shareholder is a foreign entity, the type of RPT tends to be the abusive, not the efficient one.

The study suggests future research that extends our study. First, since samples of the study are corporate announcements, then RPT included as samples are large RPT whose natures may differ from smaller RPT that are relatively not subject to regulator body and public scrutiny. Since smaller RPT are not extensively disclosed and are not subject to the regulator and public scrutiny, then these RPT are more likely to be exploited for expropriation purpose rather than for efficiency purpose. Therefore, research on smaller but probably more frequent RPT is warranted in the future. Second, since corporate governance practice might be endogeneously determined, we suggest that future studies incorporate this endogeneity when examining the effect of corporate governance practice on related party transaction.

REFERENCES


APPENDIX

Table 1: Relative Size of Related Party Transactions (RPT) among Listed Companies in Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>(RPT Assets + RPT Liabilities)/Equity</th>
<th>(RPT Sales + RPT Liabilities)/Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>43%</td>
<td>84%</td>
</tr>
<tr>
<td>2006</td>
<td>48%</td>
<td>65%</td>
</tr>
<tr>
<td>2007</td>
<td>42%</td>
<td>87%</td>
</tr>
</tbody>
</table>

Table 2: Statistics Descriptive

<table>
<thead>
<tr>
<th></th>
<th>CAR</th>
<th>DRPT</th>
<th>CGI</th>
<th>DDISCL</th>
<th>PROP</th>
<th>BOC</th>
<th>DFOR</th>
<th>MKTCAP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-0,001</td>
<td>0,470</td>
<td>0,627</td>
<td>0,430</td>
<td>0,502</td>
<td>0,334</td>
<td>0,384</td>
<td>3587,26</td>
</tr>
<tr>
<td>Median</td>
<td>-0,018</td>
<td>0,000</td>
<td>0,624</td>
<td>0,000</td>
<td>0,510</td>
<td>0,333</td>
<td>0,000</td>
<td>673,21</td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>0,274</td>
<td>0,500</td>
<td>0,074</td>
<td>0,497</td>
<td>0,161</td>
<td>0,200</td>
<td>0,488</td>
<td>9970,17</td>
</tr>
<tr>
<td>Minimum</td>
<td>-0,732</td>
<td>0,000</td>
<td>0,490</td>
<td>0,000</td>
<td>0,074</td>
<td>0,000</td>
<td>0,000</td>
<td>12,75</td>
</tr>
<tr>
<td>Maximum</td>
<td>1,673</td>
<td>1,000</td>
<td>0,837</td>
<td>1,000</td>
<td>0,949</td>
<td>0,857</td>
<td>1,000</td>
<td>107350,00</td>
</tr>
</tbody>
</table>

Variable definitions:

- **CAR** = Market adjusted cumulative return with the event window of t=-1 to t=+5.
- **DRPT** = 1 if the announced transaction is a related party transaction; else zero.
- **CGI** = Corporate Governance Index is provided by the Indonesian Institute for Corporate Directorship (2007).
- **DDISCL** = 1 if disclosure of transaction value is provided; else zero.
- **PROP** = Proportion of share ownership by the largest shareholders.
- **BOC** = Proportion of share ownership by members of the Board of Commissioners (The Supervisory Board).
- **DFOR** = 1 if the largest shareholder is foreign shareholder; else zero.
- **MKTCAP** = Market value of equity in billions of Rupiah at the end of the year.
Table 3: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>LCAR</th>
<th>DRPT</th>
<th>CGI</th>
<th>BOC</th>
<th>DDISCL</th>
<th>PROP</th>
<th>DFOR</th>
<th>LSIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pearson</td>
<td>.065</td>
<td>.012</td>
<td>-.082</td>
<td>.017</td>
<td>.044</td>
<td>-.091</td>
<td>.101</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.429</td>
<td>.880</td>
<td>.320</td>
<td>.839</td>
<td>.591</td>
<td>.267</td>
<td>.217</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>DRPT</td>
<td>Pearson</td>
<td>.065</td>
<td>1</td>
<td>.177</td>
<td>-.021</td>
<td>-.015</td>
<td>.189</td>
<td>.102</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.429</td>
<td>.029</td>
<td>.798</td>
<td>.854</td>
<td>.020</td>
<td>.214</td>
<td>.011</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>CGI</td>
<td>Pearson</td>
<td>.012</td>
<td>.177</td>
<td>1</td>
<td>-.248</td>
<td>.044</td>
<td>.009</td>
<td>.044</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.880</td>
<td>.029</td>
<td>.002</td>
<td>.595</td>
<td>.915</td>
<td>.588</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>BOC</td>
<td>Pearson</td>
<td>-.082</td>
<td>-.021</td>
<td>-.248</td>
<td>1</td>
<td>.111</td>
<td>.213</td>
<td>-.042</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.320</td>
<td>.798</td>
<td>.002</td>
<td>.175</td>
<td>.009</td>
<td>.611</td>
<td>.001</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>DDISCL</td>
<td>Pearson</td>
<td>.017</td>
<td>-.015</td>
<td>.044</td>
<td>.111</td>
<td>1</td>
<td>-.076</td>
<td>.028</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.839</td>
<td>.854</td>
<td>.595</td>
<td>.175</td>
<td>.355</td>
<td>.729</td>
<td>.518</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>PROP</td>
<td>Pearson</td>
<td>.044</td>
<td>.189</td>
<td>.009</td>
<td>.213</td>
<td>-.076</td>
<td>1</td>
<td>-.124</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.591</td>
<td>.020</td>
<td>.915</td>
<td>.009</td>
<td>.355</td>
<td>.130</td>
<td>.764</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>DFOR</td>
<td>Pearson</td>
<td>-.091</td>
<td>.102</td>
<td>.044</td>
<td>-.042</td>
<td>.028</td>
<td>-.124</td>
<td>1</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.267</td>
<td>.214</td>
<td>.588</td>
<td>.611</td>
<td>.729</td>
<td>.130</td>
<td>.313</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
<tr>
<td>LOGMK</td>
<td>Pearson</td>
<td>.101</td>
<td>.206</td>
<td>.592</td>
<td>-.269</td>
<td>.053</td>
<td>-.025</td>
<td>.083</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>.217</td>
<td>.011</td>
<td>.000</td>
<td>.001</td>
<td>.518</td>
<td>.764</td>
<td>.313</td>
</tr>
<tr>
<td>N</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
<td>151</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

See Table 2 for definitions of variables.

Table 4: Regression results of RPT on Stock Price Reaction (LCAR) with 7-days event window (Day -1 to Day +5)

\[ LCAR_i = b_0 + b_1 DRPT_i + b_2 LOGMKT_i + e_i \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.373</td>
<td>-1.596</td>
<td>0.113</td>
</tr>
<tr>
<td>DRPT</td>
<td>0.0189</td>
<td>0.465</td>
<td>0.643</td>
</tr>
<tr>
<td>LSIZE</td>
<td>0.023</td>
<td>0.884</td>
<td>0.378</td>
</tr>
</tbody>
</table>

R-squared     0.0122
Adjusted R-squared -0.001
F-statistic   0.918
Prob(F-statistic) 0.401

See Table 2 for definitions of variables.
Table 5: Regression results of RPT on Stock Price Reaction (LCAR) with Interaction Variables and with 7 days Event Window (Day -1 to day +5)

\[ \text{LCAR}_i = b_0 + b_1 \text{DRPT}_i + b_2 \text{CGI}_i + b_3 \text{DDISCL}_i + b_4 \text{PROP}_i + b_5 \text{BOC}_i + b_6 \text{DFOR}_i + b_7 \text{CGRPT}_i + b_8 \text{DDISCLRPT}_i + b_9 \text{PROPRPT}_i + b_{10} \text{BOCRPT}_i + b_{11} \text{DFORRPT}_i + b_{12} \text{LOGMKT}_i + e_i \]

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.701</td>
<td>-2.881</td>
<td>0.005</td>
</tr>
<tr>
<td>DRPT</td>
<td>0.644</td>
<td>2.551</td>
<td>0.012**</td>
</tr>
<tr>
<td>CGI</td>
<td>0.085</td>
<td>0.324</td>
<td>0.747</td>
</tr>
<tr>
<td>DDISCL</td>
<td>-0.075</td>
<td>-2.053</td>
<td>0.042**</td>
</tr>
<tr>
<td>PROP</td>
<td>0.135</td>
<td>1.436</td>
<td>0.153</td>
</tr>
<tr>
<td>BOC</td>
<td>0.056</td>
<td>0.767</td>
<td>0.445</td>
</tr>
<tr>
<td>DFOR</td>
<td>0.039</td>
<td>1.228</td>
<td>0.222</td>
</tr>
<tr>
<td>CGRPT</td>
<td>-0.833</td>
<td>-2.198</td>
<td>0.030**</td>
</tr>
<tr>
<td>DDISCLRPT</td>
<td>0.190</td>
<td>2.332</td>
<td>0.021**</td>
</tr>
<tr>
<td>PROPRPT</td>
<td>0.001</td>
<td>0.003</td>
<td>0.998</td>
</tr>
<tr>
<td>BOCRPT</td>
<td>-0.409</td>
<td>-1.707</td>
<td>0.090*</td>
</tr>
<tr>
<td>DFORRPT</td>
<td>-0.138</td>
<td>-1.871</td>
<td>0.064*</td>
</tr>
<tr>
<td>LOGMKT</td>
<td>0.048</td>
<td>1.639</td>
<td>0.103</td>
</tr>
</tbody>
</table>

R-squared 0.137
Adjusted R-squared 0.062
F-statistic 1.827
Prob(F-statistic) 0.049

**Significant at 5% level
*Significant at 10% level

CGRPT = interaction of CG and DRPT,
BOCRPT = interaction of BOC and DRPT,
PROPRPT = interaction of PROP and DRPT,
DFORRPT = interaction of DFOR and DRPT,
DDISCLRPT = interaction of DDISCL and DRPT.

See Table 2 for definitions of other variables.
Table 6: Regression result of RPT on Stock Price Reaction with Size Interaction Variables

\[ \text{LCAR}_i = b_0 + b_1 \text{DRPT}_i + b_2 \text{CGI}_i + b_3 \text{DDISCL}_i + b_4 \text{PROP}_i + b_5 \text{BOC}_i + b_6 \text{DFOR}_i + b_7 \text{CGRPT}_i + b_8 \text{DDISCLRPT}_i + b_9 \text{PROPRPT}_i + b_{10} \text{BOCRPT}_i + b_{11} \text{DFORRPT}_i + b_{12} \text{LOGMKT}_i + b_{13} \text{LMKTRPT}_i + e_i \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.673</td>
<td>-2.712</td>
<td>0.008</td>
</tr>
<tr>
<td>DRPT</td>
<td>0.583</td>
<td>1.395</td>
<td>0.165</td>
</tr>
<tr>
<td>CGI</td>
<td>0.113</td>
<td>0.446</td>
<td>0.657</td>
</tr>
<tr>
<td>DBOC</td>
<td>0.0523</td>
<td>0.689</td>
<td>0.492</td>
</tr>
<tr>
<td>DDISCL</td>
<td>-0.074</td>
<td>-1.986</td>
<td>0.049**</td>
</tr>
<tr>
<td>PROP</td>
<td>0.134</td>
<td>1.404</td>
<td>0.162</td>
</tr>
<tr>
<td>DFOR</td>
<td>0.039</td>
<td>1.206</td>
<td>0.230</td>
</tr>
<tr>
<td>DDISCRPT</td>
<td>0.189</td>
<td>2.357</td>
<td>0.020**</td>
</tr>
<tr>
<td>PROPRPT</td>
<td>0.002</td>
<td>0.014</td>
<td>0.989</td>
</tr>
<tr>
<td>DFORRPT</td>
<td>-0.139</td>
<td>-1.820</td>
<td>0.071*</td>
</tr>
<tr>
<td>BOCRPT</td>
<td>-0.405</td>
<td>-1.798</td>
<td>0.074*</td>
</tr>
<tr>
<td>CGRPT</td>
<td>-0.899</td>
<td>-1.865</td>
<td>0.064*</td>
</tr>
<tr>
<td>LOGMKT</td>
<td>0.042</td>
<td>1.578</td>
<td>0.117</td>
</tr>
<tr>
<td>LMKTRPT</td>
<td>0.011</td>
<td>0.181</td>
<td>0.856</td>
</tr>
</tbody>
</table>

R-squared 0.137
Adjusted R-squared 0.056
F-statistic 1.678
Prob(F-statistic) 0.072

**Significant at 5% level
*Significant at 10% level

LMKTRPT = interaction of LOGMKT and DRPT.
See Table 2 and 5 for definitions of other variables.

Table 7. Regression results of RPT on Stock Price Reaction (LCAR) with 11-days event window (Day -5 to Day +5)

\[ \text{LCAR}_i = b_0 + b_1 \text{DRPT}_i + b_2 \text{LOGMKT}_i + e_i \]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.239</td>
<td>-1.593</td>
<td>0.113</td>
</tr>
<tr>
<td>DRPT</td>
<td>0.050</td>
<td>1.633</td>
<td>0.105</td>
</tr>
<tr>
<td>LSIZE</td>
<td>0.025</td>
<td>1.615</td>
<td>0.108</td>
</tr>
</tbody>
</table>

R-squared 0.033
Adjusted R-squared 0.020
F-statistic 2.552
Prob(F-statistic) 0.081

See Table 2 for definitions of variables.
Table 8: Regression result of RPT on Stock Price Reaction with interaction variables and with 11 days Event Window (Day -5 to day +5)

\[
LC_{AR_i} = b_0 + b_1DRPT_i + b_2CGI_i + b_3DDISCL_i + b_4PROP_i + b_5BOC_i + b_6DFOR_i + b_7CGIRPT_i + b_8DDISCLRPT_i + b_9PROPRPT_i + b_{10}BOCRPT_i + b_{11}DFORRPT_i + b_{12}LOGMKT_i + e_i
\]

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.857</td>
<td>-2.197</td>
<td>0.030</td>
</tr>
<tr>
<td>DRPT</td>
<td>0.855</td>
<td>2.241</td>
<td>0.027**</td>
</tr>
<tr>
<td>CGI</td>
<td>0.862</td>
<td>1.740</td>
<td>0.084*</td>
</tr>
<tr>
<td>DDISCL</td>
<td>-0.106</td>
<td>-1.600.112</td>
<td></td>
</tr>
<tr>
<td>PROP</td>
<td>0.081</td>
<td>0.676</td>
<td>0.500</td>
</tr>
<tr>
<td>PBOC</td>
<td>0.113</td>
<td>1.117</td>
<td>0.266</td>
</tr>
<tr>
<td>DFOR</td>
<td>0.086</td>
<td>1.848</td>
<td>0.067*</td>
</tr>
<tr>
<td>CGIRPT</td>
<td>-1.248</td>
<td>-2.253</td>
<td>0.026**</td>
</tr>
<tr>
<td>DDISCRPT</td>
<td>0.162</td>
<td>2.112</td>
<td>0.037**</td>
</tr>
<tr>
<td>PROPRPT</td>
<td>0.054</td>
<td>0.364</td>
<td>0.717</td>
</tr>
<tr>
<td>BOCRPT</td>
<td>-0.253</td>
<td>-1.688</td>
<td>0.094*</td>
</tr>
<tr>
<td>DFORRPT</td>
<td>-0.130</td>
<td>-2.184</td>
<td>0.031**</td>
</tr>
<tr>
<td>LSIZE</td>
<td>0.023</td>
<td>1.699</td>
<td>0.092*</td>
</tr>
</tbody>
</table>

R-squared 0.152
Adjusted R-squared 0.079
F-statistic 2.066
Prob(F-statistic) 0.023

**Significant at 5% level
*Significant at 10% level
See Table 2 and 5 for definitions of other variables.