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# THE MODERATING IMPACT OF CONCENTRATED OWNERSHIP ON RELATED PARTY TRANSACTIONS AND FIRM PERFORMANCE IN THE MALAYSIAN CONTEXT

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**Abstract**

This study investigates the impact of related party transactions (RPTs) on firm performance, with a focus on the moderating role of concentrated ownership in an emerging market context. The Random effect regression was utilized for Malaysian-listed firms from 2015 to 2019 to test these assumptions. The findings reveal that RPTs are negatively correlated with firm performance, suggesting that such transactions are often motivated by expropriation concerns rather than transaction-cost efficiency. However, concentrated ownership plays a crucial governance role by mitigating the adverse effects of RPTs, thereby improving firm performance. Companies with concentrated ownership structures are better equipped to monitor and manage RPTs, reducing agency costs and opportunistic behavior. This study contributes to the literature on corporate governance by highlighting the importance of ownership concentration in alleviating the negative consequences of excessive RPTs, especially in markets characterized by high information asymmetry. The findings have significant policy implications, as they suggest that regulators should strengthen disclosure requirements and provide greater oversight of RPTs to protect minority shareholders. Future research could explore how the relationship between RPTs, ownership concentration, and firm performance evolves over time, particularly in the post-COVID-19 period, when market conditions and corporate governance practices have undergone significant changes.

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**Keywords**: Related Party Transactions, Concentrated Ownership, Firm Performance, Malaysia

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## Introduction

RPTs are defined by IFRS, specifically IAS 24, as transactions between an entity and any parties that control, jointly control, or significantly influence it. Examples of such parties include subsidiaries, associates, or key management staff. Financial statements must reveal these transactions, which might include sales, services, or loans, in order to maintain transparency and identify any potential conflicts of interest. RPTs are considered normal and widespread business practices worldwide; however, their impact on company performance can be positive or negative. RPTs may serve as an effective method in developing capital markets and assist firms and their affiliates in lowering transaction costs (Abigail & Dharmastuti, 2022; Gordon et al., 2007; Shin & Park, 1999; Wang et al., 2020). However, because RPTs can be employed for earnings management and tunneling, they are also considered activities that destroy firm value (Jian & Wong, 2010; Johnson et al., 2000; Ben & Loukil, 2023). Although RPTs can have a wide range of outcomes, a company should discourage negative RPTs and promote beneficial ones. Policymakers and academics are interested in this topic because striking this balance is not easy. As a result, this paper examines how controlling ownership strikes a balance between beneficial and detrimental RPTs, as well as how RPTs affect company performance.

Literature has shown that RPTs played a significant role in the accounting crises that rocked the financial markets at firms like Satyam Computers Ltd. (India), Asia Pulp and Paper (Indonesia), WorldCom, Adelphia, and Tyco in the US, as well as Transmile Group Berhad in Malaysia. Traditionally, RPTs have been seen as a tool used by dominant shareholders to extort minority shareholders through a variety of means, including asset sales, endorsements, related party loans, and even trading ties, as highlighted by previous research such as Cheung et al. (2006) and Jian and Wong (2010). Even though more recent studies have begun distinguishing between "good" and "bad" types of RPTs, previous empirical research on RPTs is still inconsistent. For example, Kohlbeck and Mayhew (2017), as well as Habib et al. (2015) found evidence that is consistent with the viewpoint of the contracting efficiency of RPTs. On the other hand, Jian and Wong (2010), Supatmi et al. (2021), and Habib et al. (2017) and recently Ben et al. (2023) found evidence to support that RPTs are motivated by exploitation concerns where minority shareholders are expropriated by dominant shareholders through self-dealing RPTs. This situation is heightened in the absence of enforcement and a weak legal framework.

Concentrated ownership has two different scenarios in its impact on RPTs. The first scenario is the potential to instigate agency problems, particularly when ownership concentration is pronounced, thereby confining control to a selected group of shareholders. Consequently, such a scenario may precipitate the conquest of the interests of minority shareholders (Ben et al., 2023; Woidtke & Yeh, 2013). This phenomenon is exhibited when significant shareholders maintain proximate connections with managerial personnel. In instances of heightened ownership concentration, managerial cadre typically either belongs to the controlling shareholder faction or maintains close personal affiliations. Such intimate associations may compel managers to manipulate earnings in favor of the majority's interests, to the detriment of minority shareholders' wealth (Bansal & Thenmozhi, 2020; Al-Jaifi, 2017; Abigail & Dharmastuti, 2022).

Conversely, some studies argue that concentrated ownership can serve as an effective governance mechanism. In this scenario, majority shareholders, due to their vested interests in the firm, may monitor management more closely and ensure that RPTs are conducted in a manner that benefits the company as a whole George & Kabir, 2012; Mackey et al., 2017). This perspective suggests that concentrated ownership can lead to a more positive relationship between RPTs and firm performance, as controlling ownership may use RPTs to enhance operational efficiency and align the interests of all shareholders (Bansal & Thenmozhi, 2020). In this view, concentrated ownership mitigates agency problems, leading to improved performance outcomes.

Prior empirical studies have shown that RPTs, including sales, assets, loans, and even trading connections, are just a few of the ways that concentrated ownership has traditionally been utilized to impose expropriation upon minority shareholders (see: Cheung et al., 2006 as well as Jian & Wong, 2010). The conflicts between minority and majority shareholders are exacerbated by concentrated ownership. A company with concentrated ownership expropriates minority shareholders because it shields the majority shareholders from external disciplining pressures (Bansal & Thenmozhi, 2020; Wang & Shailer, 2015). Previous research has shown that in poorly performing companies, concentrated ownership is positively correlated with RPTs (Wang & Shailer, 2015). A Malaysian study by Fooladi and Farhadi (2019) provides evidence of the need for regulators, legislators, and standard setters to monitor conflicts of interest in RPTs and limit connected parties' ability to use their influence to safeguard firms' wealth.

A significant ownership concentration distinguishes the environment in Malaysia. In contrast to countries like the United States and the United Kingdom, where shareholding is distributed, Malaysian companies typi-

cally have a concentrated share ownership held by individuals and family members (Claessense et al., 2000; Zhuang et al., 2001; Mohd & Ghazali, 2020). In such circumstances, powerful shareholders often attempt to take over firms' boards of directors and management. Therefore, the monitoring hypothesis is inappropriate in the Malaysian setting, where there is a significant disagreement between minority and majority shareholders. To grow their business empire and obtain their own benefits, controlling stockholders desire to keep company profits. A significant influence of business connections was found in the association between RPTs and firm performance, as reported by Wang et al. (2019). This study identifies a potential moderator, concentrated ownership, which drives related party transactions to be opportunistic.

This study contributes to the existing literature in several ways. First, regarding RPTs, prior studies have yielded conflicting results. For instance, some studies have evidence that RPTs may serve as a means for tunneling and consequently adversely affecting business performance (Cheung et al., 2006; Fooladi & Farhadi, 2019; Habib et al., 2017; Ben et al., 2023; Supatmi et al., 2021). Conversely, another body of literature posited that RPTs align with incentives and can enhance firms' performance (Buysschaert et al., 2004; Hendratama & Barokah, 2020; Wong et al., 2015; Kohlbeck & Mayhew, 2017; Habib et al., 2015). These divergent findings stem from the dual potential of RPTs to yield both positive and negative effects. This study aims to reconcile these conflicting findings by elucidating how RPTs influence firms' performance contingent upon the level of controlling ownership. The findings of this research display evidence that supports RPTs used by top managers to expropriate firms' resources in some non-profitable activities which negatively influence firms' performance.

Second, to the best of the researcher's knowledge, this study is the first to address the important question of how concentrated ownership affects the use of RPTs by firm managers to expropriate minority shareholders. This research sheds light on RPTs and demonstrates how they might be applied to increase shareholder benefits in the case of highly concentrated ownership. Empirical results indicate that a firm's reputation is positively correlated with controlling ownership levels; hence, ownership may be more inclined to support RPTs that increase firm performance. This result is consistent with the empirical evidence of Abigail and Dharmastuti (2022) who discovered that controlling shareholders may direct RPTs activities in ways that improve firms' value. Comparatively speaking, this is a novel discovery given that Kang et al. (2014) discovered that controlling ownership promotes RPTs that reduce firm value in the Korean market.

## Literature review and hypotheses development

### Related party transactions and firm performance

The operational policies of firms can be significantly influenced by the conflicts of interest that arise from RPTs involving linked parties and other stakeholders. This is especially true when the ownership stake of one party in the transaction is viewed as a key element in the execution of a reverse mortgage (Fooladi & Farhadi, 2019). Related parties may gain control in this situation in a private capacity at the expense of other stakeholders (Abigail & Dharmastuti, 2022). Previous literature has documented how RPTs are often perceived as possible conflicts of interest between firm managers and their stakeholders by market participants, regulators, and other corporate stakeholders, as highlighted by Gordon et al. (2004), Wang et al. (2020), as well as Kohlbeck and Mayhew (2010).

There are two different perspectives on RPTs. The efficient transaction view of RPTs assumes that RPTs are legitimate business exchanges that satisfy a firm's fundamental economic needs, like securing in-depth skills and expertise between parties who have built trust and shared private information. Ryngaert and Thomas (2012) claimed that by coordinating operations and prompting feedback from pertinent parties, RPTs have the potential to be effective contracting agreements in situations when there is insufficient information. Due to their acquaintance, they can also impart expertise, enhance the effectiveness of contracts, and establish better conditions and terms for both sides.

In nations with undeveloped markets, business organizations are prevalent. Intragroup transactions compensate for imperfect markets and ease financing and operational operations in the absence of strong legal regulations and limited contract enforcement. Khanna and Yafeh (2007) contended that group firms' RPTs are a superior adaptation to a situation where contracting is comparatively challenging. To reach new markets, firms in emerging economies can integrate their upstream and downstream activities with corresponding divisions within the company. Lee (2019) as well as Chang and Choi (1988) claimed that this could result in lower transaction costs and more efficiency. RPTs can lower transaction costs by simplifying negotiations, reducing monitoring and legal enforcement efforts, and eliminating the need to search for and vet external partners. This benefit is particularly noticeable when affiliated companies buy from and sell to related parties and participate in other "normal" economic activities (Habib et al., 2015; Kohlbeck & Mayhew, 2017; Wong et al., 2015). The main benefits of using RPTs for corporate firms are reduced transaction costs and more effective capital allocation.

Empirically, the inherent advantages of RPTs of effective contracts assist companies in several ways. According to Chang and Hong (2000), related-party sales increase corporate profitability and value by boosting efficiency and reducing transaction costs. Consistently, Wong et al. (2015) also provided evidence that supports the role of RPTs in reducing transaction costs and improving firm performance. Additionally, Habib et al. (2015) as well as Kohlbeck and Mayhew (2017) expressed that there is less information asymmetry in related party sales and purchases, which results in decreased audit expenses and misstatements as well as improved company value. Further, Wang et al. (2020) documented a gradual increase in the likelihood that RPTs will boost a company's efficiency and ultimately enhance its performance.

Unlike the efficient transaction view, the conflict-of-interest view of related party transactions (RPTs) suggests that these transactions allow controlling shareholders or managers to expropriate resources from the firm at the expense of minority shareholders (Ben et al., 2023). Insider activities, including selling assets at inflated prices or offering advantageous loans, are perceived as self-dealing tactics by RPTs, in which insiders enrich themselves at the expense of the company (Gallery et al., 2008). The possibility of agency issues is highlighted by this viewpoint, especially in companies with concentrated ownership or lax corporate governance, where oversight might not be enough to stop RPT abuse. Habib (2017) found that RPTs have been consistently linked to more serious agency issues. According to Gallery et al. (2008), since dominant ownership uses RPTs for their own gain at the expense of other shareholders' interests, RPTs are a type of agency cost that depletes value. Wang and Yuan (2012) as well as Nekhili and Cherif (2011) consistently demonstrate the adverse impact of RPTs on return on assets, serving as a proxy for firm performance.

From the above debates, the impact of RPTs on firm performance is an empirical question where the empirical results of prior studies are not consistent regarding their effect on firm performance. Thus, this study attempts to test the following hypothesis on the direct impact of RPTs on firm performance:

$H_1$: There is a negative impact of RPTs on firm performance.

## The moderating effect of concentrated ownership on the relationship between RPTs and firm performance

Agency problems may arise from concentrated ownership, especially if ownership concentration is high and limits power to a small number of shareholders who suppress the interests of minority shareholders (Ben et al., 2023; Woidtke & Yeh, 2013). Major shareholders that have strong ties to management staff are known to exhibit this tendency, which frequently leads to managerial choices that prioritize the interests of the majority over the wealth of minority ownership. Al-Jaifi (2017) as well as Bansal and Thenmozhi (2020). Regarding the impact of RPTs on firms and shareholders, there are differing viewpoints. Studies by Ryngaert and Thomas (2012) as well as Khanna and Yafeh (2007) suggest that RPTs can be useful contracting tools when working with related parties. Other studies, such as Habib (2017a) and Wang et al. (2020), highlighted the potential for conflicts of interest and agency costs, leading to the expropriation of minority shareholders. Despite this complexity, no country forbids RPTs due to their potential value-enhancing transactions. Regulators prefer disclosure over outright limitations, acknowledging the efficient transaction perspective.

In emerging markets where governance mechanisms are deficient, agency conflicts between minority and controlling shareholders are particularly pronounced, with dominant shareholders often using RPTs to exploit minority interests. Studies such as those by Wang and Yung (2011) and Fan et al. (2014) highlight the increasing use of RPTs as a substitute for earnings manipulation. Bae et al. (2002) observed that dominant shareholders divert resources from companies where they hold a smaller stake to those where their ownership is more significant through related party purchases. Similarly, Jian and Wong (2010) found that controlling shareholders use related party sales to inflate earnings, replacing traditional accrual earnings management. Related party loans further intensify agency concerns, as noted by Habib et al. (2017b), while Al-Jaifi (2017) emphasized that concentrated ownership amplifies information asymmetry, particularly in markets with weak legal protections for minority shareholders. This dynamic can incentivize dominant shareholders to exploit these conditions for personal gain, thereby detrimentally affecting company performance. Abigail and Dharmastuti (2022) found evidence in emerging markets that RPTs can have a significant positive effect on firms' value only when majority shareholders are dominant in management.

However, strong governance mechanisms play a critical role in transforming RPTs from conflict-prone to efficient transactions by aligning the goals of individuals with those of the firm, thereby reducing conflicts and expropriation risks. Effective governance also helps moderate the negative impact of RPTs on earnings quality, highlighting its importance in managing RPT-related challenges. Studies by Hasnan et al. (2016) as well as Farhan and Almaqtari (2023) explore the influence of corporate governance on the relationship between RPTs and earnings quality. Hasnan et al. (2016) found that RPTs could increase the risk of conflicts by

providing incentives for related parties to expropriate resources from minority shareholders and manipulate earnings to conceal these actions. However, strong governance mechanisms mitigate these negative effects by enhancing the legitimacy of managerial decisions, particularly in cases of potential conflicts of interest between managers and shareholders.

Furthermore, the highly concentrated ownership may act as a vital governance mechanism to contribute to increased performance because of knowledge spillover effects, as highlighted by previous research (Davis et al., 1992; Markides & Williamson, 1994). Hence, prior studies revealed evidence to support the resource-based hypothesis, which assumes a company affiliation may be particularly useful in optimizing these spillover benefits through resource sharing or transit among connected enterprises (George & Kabir, 2012; Mackey et al., 2017). According to Bansal and Thenmozhi (2020), RPTs and concentrated ownership correlate positively. Additionally, concentrated ownership is more likely to support RPTs that are thought to benefit minority shareholders. They also illustrated the link between RPTs and increased company performance.

As previously demonstrated, the literature presents mixed findings on whether concentrated ownership adds value or detracts from it. This study investigates whether concentrated ownership positively moderates the relationship between RPTs and firm performance in a significant but moderate manner, using data from an emerging market. Accordingly, the following hypothesis is tested:

$H_2$: Concentrated ownership positively moderates the relationship between RPTs and firm performance.

## Methodology

### Sample and data

This study's population encompasses all companies listed on Bursa Malaysia's Main Market as of the end of 2019. The top 120 companies, based on market capitalization, make up the sample for the study. This research focuses on the top 120 firms because information about concentrated ownership and RPTs must be manually gathered, and most small and medium-sized companies in Malaysia could not provide this information or had difficulty identifying the number of RPTs. Firms with large capitalization are also more likely to be owned by dominant shareholders who can exert substantial control over firms, thus making it easier for minority shareholders to transfer wealth to the majority ownership. The period from 2015 to 2019 is the focus of this study. The cutoff was chosen as it captures the relevant corporate governance dynamics in Malaysia before significant disruptions such as the COVID-19 pandemic.

Information on financial variables was collected from the Data Stream database. Additional data was manually gathered from the firms' annual reports, including ownership concentration, RPTs, and several control variables. As indicated in Panel A of Table 1, this study removed firm-year records for which ownership concentration, RPTs, and financial factors had missing values. Finally, 501 firm-year observations covering five years became the final sample of this study. Panel B displays the sample distribution by Year, while Panel C displays the distribution by industry (derived from the Bursa Malaysia classification).

**Table 1: Sample distribution**

| **Panel A: Sample selection** | | |
|---|---|---|
| Details | | Observations |
| Total firms, observations 2015 - 2019 | | 600.0 |
| Less: Firms with missing data | | 99.0 |
| Final sample – firm-year observations | | 501.0 |
| **Panel B: Sample distribution by year** | | |
| Years | Observations | % Observations |
| 2015 | 99 | 19.8% |
| 2016 | 102 | 20.4% |
| 2017 | 105 | 21.0% |
| 2018 | 98 | 19.6% |
| 2019 | 97 | 19.4% |
| Total | 501 | 100.0% |
| **Panel C: Sample distribution by industry** | | |
| Sector | Observations | % Observations |
| Trading and services | 152 | 30.3% |
| Finance | 78 | 15.6% |
| Industrial products | 65 | 13.0% |

| Panel C: Sample distribution by industry | | |
|---|---|---|
| Consumer products | 55 | 11.0% |
| Plantation | 46 | 9.2% |
| Properties | 39 | 7.8% |
| Construction | 34 | 6.8% |
| Infrastructure project companies | 23 | 4.6% |
| Technology | 9 | 1.8% |
| Total | 501 | 100.0% |

*Source: Author's own work.*

## Main variables measures

### Firm performance

Following the previous studies such as Anderson and Reeb (2003), Al-Gamrh et al. (2020), and Wang et al. (2020), firm performance is measured by the return on assets (ROA). The ROA is calculated as income before interest, taxes, depreciation, and amortization divided by total assets.

### Related party transactions

RPTs are defined by IAS 24 as transactions that take place between a reporting entity and its related parties. As well as people who belong to the same group, such as subsidiaries, associates, joint ventures, key management employees, and their immediate families, related parties are any persons or entities that control, jointly control, or significantly influence the reporting firms. Malaysian listed firms apply IFRS as they disclose RPTs in the form of sales and purchase goods and services as well as loans, guarantees and assets. This research follows previous studies such as Al -Dhamari et al. (2018), Abigail and Dharmastuti (2022), Ben et al. (2023), and Rahmat et al. (2020) to measure RPTs by the total amount of RPTs scaled by total assets because the benefits of business relatedness are more likely to be demonstrated through trading connections among connected firms.

### Concentrated ownership

In determining whether the controller ownership's ability to exert modest pressure on business managers to participate in high-level trades with related parties affects the relationship between RPTs and firm performance, this research split the sample into halves based on ownership concentration (OWNCON). Based on empirical studies such as Zhuang et al. (2001) and Al-Jaifi (2017), the top five owners own about five percent of all outstanding shares of Malaysian listed businesses. The percentage of shares held by the biggest group, who together own at least 5% of the company's equity, is then added to determine OWNCON. Next, this research calculates the median of OWNCON; firms are classified as having high ownership concentration if their OWNCON values exceed the median, and vice versa. Regarding control variables measurement, they have been clarified and exhibited in Appendix 1.

## Empirical models

Equation 1 of this study examines the direct relationship between RPTs and company performance while considering several control variables shown in the literature to impact firm performance significantly.

$$ROA = \alpha_0 + \alpha_1 RPT + \alpha_2 INDIR + \alpha_3 LEV + \alpha_4 SIZE + \alpha_5 CF + \alpha_6 GROWTH + \alpha_7 AGE + \alpha_8 BIG4 + YEAR\ DUMMIES + INDUSTRY\ DUMMIES + error\ term \quad (1)$$

ROA is calculated by dividing net income before extraordinary items by the average amount of assets. The main variable, RPT, is defined as the total amount of RPTs scaled by total assets (Abdul Wahab et al.,2011; Al-Dhamari et al., 2018; Habib et al., 2015). Previous studies on corporate performance literature have identified a set of control variables (Bona-Sánchez et al., 2017; Wang et al., 2019; Wang et al., 2020) – board independence (INDIR), leverage (LEV), firm size (SIZE), operating cash flow (CF), firm growth (GROWTH), firm age (AGE) and auditor size (BIG4). The proportion of independent board directors is the measure INDIR. LEV is debt-to-asset ratio, SIZE is the log of a firm's total assets, CF is the operating cash flow divided by total assets, GROWTH is the market-to-book value ratio of a firm, and AGE is the natural log of firm age. Firms audited by BIG4 firms are assigned a value of 1; otherwise, 0 is assigned. Winsorizing is done on all continuous control variables between 1 and 99%. Years and industries were included in the model to ensure that the estimated coefficients capture firm-specific effects rather than broader market trends, these dummies help control for macroeconomic conditions and industry-specific factors that may influence firm performance and related party transactions.

A summary of the measurements is exhibited in Appendix 1. This study incorporates year-fixed effects and cluster standard errors based on firms to accommodate for the potential correlation between the error terms within and between firms. Subsequently, Equation 2 explores whether concentrated ownership mod-

erates the relationship between RPTs and firm performance, represented as follows.

$$ROA = \alpha_0 + \alpha_1 RPT + \alpha_2 CONOWN + \alpha_3 RPT * CONOWN + \alpha_4 INDIR + \alpha_5 LEV + \alpha_6 SIZE + \alpha_7 CF + \alpha_8 GROWTH + \alpha_9 AGE + \alpha_{10} BIG4 + YEAR\ DUMMIES + INDUSTRY\ DUMMIES + error\ term \quad (2)$$

CONOWN (ownership concentration) measures the proportion of shares owned by the top shareholders who own at least 5% of the company's equity. The interaction variables RPT x CONOWN are computed to explore the hypothesis that concentrated ownership is more likely to use the RPTs as a means of transferring the resources of minority shareholders to their own benefit, or they may play a positive role in reducing costs and improving firm value. Specifically, CONOWN and total RPTs at 1 and 99% are winsorized to mitigate the effect of outliers.

# Results

## Descriptive statistics

Table 2 presents the descriptive statistics, encompassing all variables utilized in the study models, such as financial performance, residual profit percentages, concentrated ownership, and the characteristics of the control variables. The sample groups fared well overall, with an average ROA of 8.18%. The ROA distribution is symmetrical if its median is around 1.5 times smaller than its mean. RPTs account for 1721 million Ringgit on average, indicating that they are widely used in the Malaysian market. The maximum CONOWN is approximately 89% (mean value: 53%), suggesting that concentrated ownership is very well-liked by Malaysian listed companies. Additionally, the control variables' averages, values, and medians, as shown in the table, are consistent with earlier research and do not contain any abnormal values (Al-Dhamari et al., 2018; Habib et al., 2017a; Habib et al., 2017b; Rahmat et al., 2020).

**Table 2: Descriptive statistics**

| Panel A: Summary statistics | | | | | | |
|---|---|---|---|---|---|---|
| Variables | Mean | Median | SD | Min | p75 | Max |
| ROA | 8.18 | 7.67 | 8.55 | -2.55 | 9.60 | 56.12 |
| RPT (%) | 0.10 | 0.06 | 0.08 | 0.00 | 0.02 | 0.11 |
| CONOWN | 0.53 | 0.51 | 0.16 | 0.06 | 0.64 | 0.89 |
| INDIR | 0.44 | 0.46 | 0.13 | 0.36 | 0.41 | 0.80 |
| LEV | 0.24 | 0.21 | 0.17 | 0.00 | 0.33 | 0.76 |
| SIZE (RM000) | 27,823,000.00 | 21,156,000.00 | 53,738,000.00 | 61,717.00 | 51,821,000.00 | 372,420,000.00 |
| CF | 0.08 | 0.06 | 0.10 | -0.71 | 0.12 | 0.83 |
| GROWTH | 2.63 | 1.30 | 5.53 | -2.50 | 2.36 | 80.84 |
| AGE | 27.13 | 22.00 | 19.62 | 1.00 | 40.00 | 109.00 |
| BIG4 | 0.88 | 1.00 | 0.32 | 0.00 | 1.00 | 1.00 |

Note: Variable definitions: ROA is the ratio of net income before extraordinary items to the average of total assets. RPT is the ratio of related party transactions to total assets. CONOWN is the ownership percentage held by the top five shareholders. INDIR is the percentage of independent board directors. LEV is the debt to assets ratio. SIZE is the log of a firm's total assets. CF is the operating cash flow divided by the total assets. GROWTH is firm market-to-book value. AGE is the natural log of firm age. Firms audited by BIG4 auditors are assigned "1", otherwise "0"

*Source: Author's own work.*

## Correlation

The Pearson correlation matrix presented in Table 3 illustrates the relationships between the related variables. The relationship between related party transactions (RPT) and company performance (ROA) is negative, suggesting that RPTs are not lucrative and contribute to a decline in financial performance. CONOWN is positively associated with RPT and ROA. The correlations suggest that concentrated ownership can push managers to engage in related party transactions that, in turn, increase firm performance. This implies that ownership concentration functions as a powerful tool for good governance, enabling businesses to maintain financial stability and improve transparency even in the face of RPTs. Regarding the control variables, larger firms are more likely to engage in RPTs, while highly leveraged firms are less likely to engage in RPTs. The absolute values of the Pearson coefficients are lower than 0.40.

**Table 3: Correlation matrix**

| Variables | ROA | RPT | CONOWN | INDIR | LEV | SIZE |
|---|---|---|---|---|---|---|
| ROA | 1.00 | | | | | |
| RPTs | -0.13 | 1.00 | | | | |
| CONOWN | 0.11 | 0.26 | 1.00 | | | |
| INDIR | 0.13 | 0.06 | -0.19 | 1.00 | | |
| LEV | 0.02 | -0.19 | 0.03 | -0.80 | 1.00 | |
| SIZE | -0.30 | 0.23 | 0.16 | 0.12 | -0.14 | 1.00 |
| CF | -0.24 | 0.00 | 0.09 | 0.04 | -0.15 | 0.36 |
| GROWTH | 0.12 | -0.06 | -0.13 | 0.08 | -0.26 | -0.12 |
| AGE | -0.11 | 0.02 | 0.03 | -0.03 | -0.15 | 0.34 |
| BIG4 | 0.09 | 0.04 | 0.22 | 0.26 | -0.07 | 0.11 |

| Variables | CF | GROWTH | AGE | BIG4 | VIF |
|---|---|---|---|---|---|
| ROA | | | | | 1.84 |
| RPTs | | | | | 2.02 |
| CONOWN | | | | | 1.37 |
| INDIR | | | | | 1.51 |
| LEV | | | | | 1.04 |
| SIZE | | | | | 2.76 |
| CF | 1.00 | | | | 2.25 |
| GROWTH | -0.14 | 1.00 | | | 1.92 |
| AGE | 0.40 | -0.18 | 1.00 | | 1.36 |
| BIG4 | 0.08 | -0.10 | 0.09 | 1.00 | 1.13 |

Note: Boldface indicates statistical significance at the 5% level or better

*Source: Author's own work.*

Before performing the primary regressions, the study conducted several diagnostic tests based on the assumptions of ordinary least squares (OLS) regression. First, the data distribution is subjected to diagnostic tests for outliers, multicollinearity, and normality. The Jarque-Bera test was used to examine the residuals for each regression model to verify that they were normal. According to the findings, all regression models' Jarque-Bera test p-values are greater than the 0.05 significance level, indicating that the data are normally distributed. Second, to ascertain whether there is multicollinearity among the independent variables, the variance inflation factor (VIF) was also calculated in addition to the Pearson correlation matrix. According to Table 3, multicollinearity is not a significant issue because all variables' VIFs remain between 1 and 2.8. Third, variables with continuous values, namely ROA, RPTs, INDIR, LEVM SIZE, CF, GROWTH, and AGE, were winsorized at the 1$^{st}$ and 99$^{th}$ percentiles in order to eliminate the impact of outliers and data errors.

## Regression results

To address potential estimation issues, such as heteroscedasticity, cross-sectional dependence, and autocorrelation, multiple diagnostic tests were conducted. The Wooldridge test for autocorrelation was applied to the panel data, and the results revealed no significant autocorrelation problem. To assess heteroscedasticity, the Breusch-Pagan / Cook-Weisberg (BPCW) test was employed, and with p-values above the 0.05 threshold, the data showed no signs of heteroscedasticity. In addition to these diagnostic checks, further evaluations-such as tests for outliers, normality, and correlation-were performed to ensure the integrity of the dataset. To refine the regression model choice, two supplementary tests were conducted. First, the Breusch-Pagan Lagrange Multiplier (BPLM) test was applied to differentiate between random effects and pooled OLS models. Aligning with the findings of Breusch and Pagan (1980), the results indicated that the random effects model was preferable, as the null hypothesis was rejected at a significance level of $p < 0.005$.

Following this, the Hausman test (Hausman, 1978) was conducted to determine the suitability of the random effects model versus the fixed effects model. The test results favored the random effects model, suggesting that the individual effects are uncorrelated with the regressors, which aligns with the assumptions of the random effects approach. Consequently, the random effects model was adopted for the final analysis, as it provides more efficient and unbiased estimates under these conditions. This approach, guided by the Hausman test, ensured that the chosen model was the

most appropriate for the data, leading to more accurate and reliable results.

This study assumes that a greater reliance on RPTs may result in lower (or higher) firm performance because these RPTs may involve deviant behaviors, such as the exploitation of minority shareholders, while on the positive side, RPTs may become actual business necessities by lowering transaction costs. In testing the first hypothesis ($H_1$), this research utilizes the OLS regression in a multivariate regression framework to evaluate the effect of RPTs on firm performance. Next, the second hypothesis ($H_2$), which states that concentrated ownership will moderate the relationship between RPTs and firm performance, is tested. The regression results for the relationship between RPTs and firm performance are shown in Model 1 of Table 4. The results of the moderating influence of concentrated ownership on the relationship are shown in Model 2. Additionally, the research incorporates year and industry effects into each regression model.

The results reveal that the coefficient of RPTs is negative and significant (coefficient -1.84, z-statistic -3.03, $p < 0.01$), suggesting that firms with higher RPTs are likely to perform poorly compared to their lower counterparts. In terms of economic significance, the negative coefficient estimates of -1.84 is consistent with the argument that RPT firms use tunneling activities, knowing that they are more likely to cause a reduction in performance. The findings thus support $H_1$. This negative coefficient is consistent with Habib et al. (2017a) and Supatmi et al. (2021), who documented the negative effect of RPTs on firms' financial performance. The RPTs' negative influence on firm performance may be due to inefficient monitoring of governance mechanisms.

**Table 4: Random effect model for RPTs, Concentrated ownership, and firm performance**

| Variables | Predicted Sign | Model 1 | | Model 2 | |
|---|---|---|---|---|---|
| | | Coefficient | z-value | Coefficient | z-value |
| INTERCEPT | ? | 1.580 | 5.72*** | 1.230 | 4.92*** |
| RPT | –/+ | -1.840 | -3.03*** | -1.060 | -2.23** |
| CONOWN | ? | | | 0.960 | 3.72*** |
| RPT x CONOWN | –/+ | | | 1.350 | 2.16** |
| INDIR | + | 0.570 | 1.87* | 0.370 | 1.02 |
| LEV | – | -2.260 | -3.35*** | -1.920 | -3.42*** |
| SIZE | – | -0.840 | -4.07*** | -0.690 | -4.58*** |
| CF | – | -1.570 | -0.92 | -1.080 | -1.13 |
| GROWTH | + | 1.430 | 4.18*** | 0.630 | 3.14*** |
| AGE | – | -0.570 | -0.14 | -0.220 | 0.86 |
| BIG4 | + | 1.180 | 2.11** | 1.370 | 1.53* |
| Year | | Yes | | Yes | |
| Industry | | Yes | | Yes | |
| No. of Observations | | 501.000 | | 501.000 | |
| Wald chi-squared | | 65.720 | | 58.340 | |
| p-value (chi-squared) | | 0.000 | | 0.000 | |
| R-squared (overall) | | 0.201 | | 0.238 | |

Notes: Random effect regressions are used for Models 1 and 2. ROA is used as a proxy for firm performance. RPT is the total related party transactions scaled by total assets. CONOWN is the ownership percentage held by the top five shareholders. The control variables presented in Models 1 and 2 are INDIR, LEV, SIZE, CF, GROWTH, AGE, and BIG4, as listed in Appendix A. ***, **, * represent significance level of 0.01, 0.05, and 0.10 respectively

*Source: Author's own work.*

Model 2 presents the results of the hypothesis that assumes concentrated ownership plays a significant moderating role in the association between RPTs and firm performance. The variable of primary interest is the sign and significance of the coefficient on the interactive variable RPT x CONOWN. This research expects the coefficient to be positive to support the hypothesis that concentrated ownership firms adopt the efficient transaction view of RPTs. According to this view, concentrated ownership firms use RPTs to minimize transaction costs and efficiently allocate capital resources for more profitable activities for the benefit of shareholders; as a result, firm performance will increase. The results in Model 2 show a positive coefficient of the interaction variable RPT x CONOWN (coefficient = 0.35, t-statistic = 2.76, $p < 0.01$), thus supporting $H_2$. The re-

results suggest that concentrated ownership may employ firm resources for profitable activities that may serve their own benefits. The results are consistent with a study by Wang et al. (2020), which discovered that firm performance will eventually be improved progressively, believing that RPTs will increase efficiency and lessen information asymmetry. However, the opportunistic role of concentrated ownership is not evidenced in this study. The results do not support Al-Jaifi (2017), who documented that firms with high levels of ownership concentration are more likely to practice information asymmetry against outsider shareholders, particularly in countries with weak legal systems and minority shareholders' protection.

The findings of this research regarding the impact of RPTs on firm performance contrast with those of Kohlbeck and Mayhew (2017) and Habib et al. (2015), who support the theory that RPTs enhance contracting efficiency by reducing transaction costs and aligning interests between parties. These studies suggest that RPTs can improve firm performance when conducted transparently and used to create operational efficiencies. However, this research challenges that view, revealing evidence that RPTs may not always positively affect performance, depending on the nature and context of the transactions. In contrast, the results align with the work of Jian and Wong (2010), Supatmi et al. (2021), and Habib et al. (2017), who argue that RPTs often serve as tools for exploitation, particularly in weak governance environments. These studies support the expropriation hypothesis, which posits that dominant shareholders may use RPTs for self-dealing, expropriating resources at the expense of minority shareholders and negatively affecting firm performance. The results of this research contribute to the ongoing debate by emphasizing the critical role of governance in preventing the misuse of RPTs, highlighting the dual nature of these transactions as either efficiency-enhancing or exploitative depending on the governance context.

Regarding the moderating role of concentrated ownership, the present research's findings differ from prior studies, such as Bansal and Thenmozhi (2020), Fooladi and Farhadi (2019) as well as Wang and Shailer (2015), which demonstrated a detrimental impact of controlling ownership on firm performance. These studies, particularly in the context of developing countries, argue that controlling shareholders often engage in self-serving behavior that undermines firm performance, as weak governance structures allow them to expropriate resources from minority shareholders. However, the findings of this research support the hypothesis that in concentrated ownership firms, particularly in more developed markets with stronger governance systems, RPTs can be used to minimize transaction costs and allocate capital more efficiently. In these environments, controlling shareholders are more likely to utilize RPTs for the firm's benefit, enhancing profitability and protecting their interests from external pressures. This suggests that the impact of concentrated ownership on firm performance may differ between developed and developing countries. In developed countries, where regulatory frameworks and shareholder protections are more robust, controlling ownership may act in ways that benefit all shareholders. Conversely, in developing countries, weaker governance allows for greater risks of exploitation and value destruction by concentrated ownership. Thus, the effectiveness of concentrated ownership in moderating the impact of RPTs depends heavily on the institutional and governance context.

## Sensitivity analyses using other measurements for firm performance

This study conducted a robust analysis of the sensitivity of the main analysis by two regression exercises. First, this research replaced the ROA with Tobin's Q as a measure of firm performance, the results of which are tabulated in Table 5. It demonstrates that because the interaction variable is substantial, the primary conclusion does not alter. Specifically, the relationship between RPTs and firm performance is moderated by concentrated ownership.

**Table 5: Tobin's Q as an alternative measurement for firm performance**

| Variables | Predicted Sign | Model 1 | | Model 2 | |
|---|---|---|---|---|---|
| | | Coefficient | t-value | Coefficient | t-value |
| INTERCEPT | ? | 2.090 | 6.12*** | 1.730 | 5.44*** |
| RPT | –/+ | -1.170 | -3.76*** | -1.870 | -2.34** |
| CONOWN | ? | | | 1.030 | 2.92*** |
| RPT x CONOWN | –/+ | | | 2.120 | 3.12*** |
| INDDIR | + | 0.780 | 1.02 | 0.610 | 0.87 |
| LEV | – | -1.760 | -3.46*** | -2.130 | -3.11*** |
| SIZE | – | -0.590 | -4.82*** | -0.580 | -5.29*** |
| CF | – | -0.820 | -1.02 | -0.940 | -0.74 |

| Variables | Predicted Sign | Model 1 | | Model 2 | |
|---|---|---|---|---|---|
| | | Coefficient | t-value | Coefficient | t-value |
| GROWTH | + | 1.180 | 5.24*** | 0.470 | 4.63*** |
| AGE | – | -1.010 | -0.79 | -0.820 | 1.12 |
| BIG4 | + | 0.630 | 1.96* | 2.010 | 2.04** |
| Year | | Yes | | Yes | |
| Industry | | Yes | | Yes | |
| No. of Observations | | 501.000 | | 501.000 | |
| Wald chi-squared | | 52.140 | | 48.680 | |
| p-value (chi-squared) | | 0.000 | | 0.000 | |
| R-squared (overall) | | 0.144 | | 0.163 | |

Notes: Results for related party transactions and Tobin's Q are shown in Model 1, and results for the moderating effect of concentrated ownership on the relationship between RPT and Tobin's are shown in Model 2. Tobin's Q is the asset-weighted average of firms' Tobin's Q. Appendix A contains the descriptions of the additional variables. The control variables employed in the main models remain. ***, **, * represent significance level of 0.01, 0.05, and 0.10 respectively

*Source: Author's own work.*

Second, financial firms have distinct features, involving regulatory frameworks, and capital structures, and unique business shapes, which may affect the study's results. Considering this, a robust test was performed by excluding financial firms from the study's sample and the analysis repeated to determine whether the existing financial firms influenced the examination of the study's relationships. The results of this analysis, consistent with those revealed in the main analysis presented in Table 4, showed no significant changes in the relationship between RPTs, ownership concentration, and firm performance.

**Table 6: Random effect model for RPTs, Concentrated ownership, and firm performance with excluding financial firms**

| Variables | Predicted Sign | Model 1 | | Model 2 | |
|---|---|---|---|---|---|
| | | Coefficient | t-value | Coefficient | t-value |
| INTERCEPT | ? | 1.370 | 5.11*** | 2.020 | 4.78*** |
| RPT | –/+ | -1.230 | -3.82*** | -1.470 | -1.96* |
| CONOWN | ? | | | 1.460 | 3.26*** |
| RPT x CONOWN | –/+ | | | 0.930 | 3.71*** |
| INDDIR | + | 0.230 | 0.56 | 0.740 | 0.98 |
| LEV | – | -2.110 | -4.53*** | -1.180 | -4.22*** |
| SIZE | – | -0.760 | -5.35*** | -0.710 | -5.13*** |
| CF | – | -0.180 | -1.19 | -1.080 | -0.32 |
| GROWTH | + | 0.980 | 3.57*** | 0.630 | 3.92*** |
| AGE | – | -1.110 | -0.14 | -0.220 | 0.86 |
| BIG4 | + | 1.120 | 1.78* | 1.370 | 2.36** |
| Year | | Yes | | Yes | |
| Industry | | Yes | | Yes | |
| No. of Observations | | 423.000 | | 423.000 | |
| Wald chi-squared | | 43.610 | | 45.930 | |
| p-value (chi-squared) | | 0.000 | | 0.000 | |
| R-squared (overall) | | 0.173 | | 0.181 | |

Notes: Appendix A contains descriptions of the additional variables. The control variables employed in the main models remain. ***, **, * represent significance level of 0.01, 0.05, and 0.10 respectively

*Source: Author's own work.*

Third, a Two-Stage Least Squares (2SLS) technique was used to address potential endogeneity in the moderating influence of concentrated ownership on the link between RPTs and company performance. Reverse causality or missing variables that impact both RPTs and firm performance might give rise to endogeneity. Following a previous study such as Jian and Wong (2010) and Wang et al. (2019), instruments were chosen that are associated with RPTs but uncorrelated with the error component in the firm performance equation for use as instrumental variables for RPTs in the first stage of the 2SLS model. In the second stage, the moderating influence of concentrated ownership on the RPTs-firm performance relationship was calculated using the expected values of RPTs from the first stage as presented in Model 1 and Model 2 in Table 7.

The analysis findings tabulated in Model 1 and Model 2 of Table 7 are similar to the results of the main analysis presented in Table 4. They reveal a negative and substantial link between RPTs and firm performance for both ROA and Tobin's Q. Additionally, the results of the interaction variable between RPT and RPT x CONOWN and the beneficial effect of RPT x CONOWN on the relationship, after adjusting for potential endogeneity in RPT, between RPT and firm performance. Particularly, the outcomes in Model 2 of Table 4 and Model 1 and Model 2 of Table 6 are likewise in agreement.

**Table 7: Endogeneity test: two-stages least square (IV-2SLS) regression**

| Variables | Predicted Sign | ROA | | Tobin's Q | |
|---|---|---|---|---|---|
| | | Coefficient | t-value | Coefficient | t-value |
| INTERCEPT | ? | 6.45 | 3.47*** | 4.04 | 3.83*** |
| RPT | –/+ | -1.13 | -2.40** | -2.83 | -2.38** |
| CONOWN | ? | 3.19 | 1.95* | 5.56 | 1.79* |
| RPT x CONOWN | –/+ | 2.14 | 2.91** | 2.03 | 2.48** |
| INDDIR | + | 0.07 | 1.41 | 0.04 | 1.67* |
| LEV | – | -0.16 | -0.70 | -0.19 | -0.26 |
| SIZE | – | -8.81 | -1.86* | -11.69 | -2.25** |
| CF | – | 0.85 | 1.30 | 0.76 | 0.67 |
| GROWTH | + | 3.58 | 2.28** | 4.41 | 2.83*** |
| AGE | – | -1.13 | -2.40** | -1.86 | -2.38** |
| BIG4 | + | 5.19 | 1.96* | 7.56 | 1.01 |
| Year | | Yes | | Yes | |
| Industry | | Yes | | Yes | |
| Wald chi2 | | 150.56 | | 136.93 | |
| $R^2$ | | 25.30% | | 23.80% | |
| N | | 487.00 | | 487.00 | |
| Hausman test | | 153.27 (p = 0.000) | | 126.84 (p = 0.000) | |
| F-Statistic | | 16.37 | | 21.03 | |

Note(s): All variables are defined in Appendix 1. ***, ** and * indicate significance at the p < 1%, 5% and 10%, respectively

*Source: Author's own work.*

## Conclusions

This study explores the circumstances under which RPTs impact firm performance, focusing on the role of ownership concentration. The findings indicate that RPTs have a negative correlation with company performance, reinforcing the idea that such transactions are often motivated by expropriation concerns rather than transaction-cost efficiency. However, the study also reveals that concentrated ownership significantly mitigates these negative effects. Specifically, firms with concentrated ownership structures are better positioned to monitor and manage RPTs, thereby reducing agency costs associated with opportunistic behavior. This suggests that ownership concentration serves as an effective governance tool, allowing companies to protect their financial interests and enhance transparency even in the face of RPTs.

These findings have practical consequences that go beyond the confines of academia. They provide insight into the important driving forces behind RPTs and how they impact company performance. Understanding how concentrated ownership affects RPT value can be very beneficial for investors and policymakers. Gaining insight into the dynamics of concentrated ownership might benefit investors in evaluating the risks connected with companies that are vulnerable to RPT-related

agency issues. As a result of this increased susceptibility to agency conflicts, businesses with fragmented ownership arrangements may be perceived as riskier investments. Companies with concentrated ownership, on the other hand, especially those with watchful controlling shareholders, offer a more dependable investment opportunity.

From a managerial perspective, the insights provided by this study can enhance decision-making processes by clarifying the relationship between RPTs, ownership concentration, and firm performance. Academically, this research contributes to the existing body of knowledge on corporate governance and financial success, inviting future investigations into the contextual factors that affect the effectiveness of ownership concentration as a moderating force in RPTs. Further research could explore how these relationships evolve over time, particularly in response to shifting regulatory environments and market conditions.

In summary, the complex relationship between RPTs, ownership concentration, and firm performance highlights the necessity for a nuanced approach to corporate governance. Recognizing that ownership concentration can mitigate the adverse effects of RPTs offers opportunities for improving corporate practices and fostering a more stable business environment. This study's findings also bear significant implications for managerial decision-making, particularly regarding the oversight of controlling shareholders who may exploit RPTs to divert the firm's resources for personal gain. Enhanced regulatory scrutiny over RPTs is essential to safeguard minority shareholders and bolster market confidence, thereby promoting more effective resource allocation.

Finally, ongoing prioritization of corporate governance issues surrounding RPTs is warranted, given their potential market ramifications. Future research endeavors could delve into the examination of expropriative practices associated with different types of RPTs such as sales, purchases, and loans - and their distinct impacts on firm performance. Additionally, studies focusing on the period after COVID-19 would be invaluable, as the pandemic has introduced new dynamics in corporate governance and altered market conditions. Understanding how RPTs and ownership concentration interact in the post-pandemic landscape will be crucial for businesses and policymakers to navigate the evolving corporate governance challenges and opportunities. By addressing these dynamics, future research can contribute to more resilient corporate governance frameworks in a rapidly changing world.

## References

Abigail, A. & Dharmastuti, C. (2022). The impact of related party transactions on firm value in Indonesia: moderating role of good corporate governance. Cogent Business & Management, 9(1), 1-23.

Aharony, J., Wang, J. & Yuan, H. (2010). Tunneling as an incentive for earnings management during the IPO process in China. Journal of Accounting and Public Policy, 29, 1-26.

Al-Dhamari, R.A., Al-Gamrh, B., Ku Ismail, K.N.I. & Haji Ismail, S.S. (2018). Related party transactions and audit fees: the role of the internal audit function. Journal of Management and Governance, 22(1), 187-212, https://doi.org/10.1007/s10997-017-9376-6.

Al-Gamrh, B., Ku Ismail, K.N.I., Ahsan, T. & Alquhaif, A. (2020). Investment opportunities, corporate governance quality, and firm performance in the UAE, Journal of Accounting in Emerging Economies, 10(2), 261-276.

Al-Jaifi, H.A. (2017). Ownership concentration, earnings management and stock market liquidity: evidence from Malaysia. Corporate Governance: The International Journal of Business in Society, 17(3), 490-510.

Anderson, R. & Reeb, D. (2003). Founding-family ownership and firm performance: Evidence from the S&P 500. Journal of Finance, 58(3), 1301-1328.

Bae, K., Kang, J. & Kim, J. (2002). Tunneling or value added? Evidence from mergers by Korean business groups. Journal of Finance, 57(6), 2695-2740.

Bae, S., Kwon, T. & Lee, J. (2011). Does corporate diversification by business groups create value? Evidence from Korean chaebols. Pacific-Basin Finance Journal, 19(5), 535-553.

Bansal, S. & Thenmozhi, M. (2020). Does concentrated founder ownership affect board independence? Role of corporate life cycle and ownership identity. Pacific-Basin Finance Journal, 62, 1-30.

Ben, C.S. & Loukil, N. (2023). Political connections, related party transactions and firm performance: evidence from Tunisian context. Journal of Accounting in Emerging Economies, 13(1), 22-42.

Ben Fatma, H. & Chouaibi, J. (2023). Corporate governance and firm value: a study on European financial institutions. International Journal of Productivity and Performance Management, 72(5), 1392-1418.

Berkman, H., Cole, R. & Fu, L. (2009). Expropriation through loan guarantees to related parties: Evidence from China. Journal of Banking and Finance, 33(1), 141-156.

Bona-Sánchez, C., Fernández-Senra, C. & Pérez-Alemán, J. (2017). Related-party transactions, dominant ownership and firm value. BRQ Business Research Quarterly, 20(1), 4-17, https://doi.org/10.1016/j.brq.2016.07.002.

Bozec, Y. & Laurin, C. (2008). Large shareholder entrenchment and performance: Empirical evidence from Canada. Journal of Business Finance & Accounting, 35(1), 25-49.

Buysschaert, A., Deloof, M. & Jegers, M. (2004). Equity sales in Belgian corporate groups: expropriation of minority shareholders? A clinical study. Journal of Corporate Finance, 10(1), 81-103.

Chang, S. & Choi, U. (1988). Strategy, structure and performance of Korean business groups: A transactions cost approach. Journal of Industrial Economics, 37(2), 141-158.

Chang, S. & Hong, J. (2000). Economic performance of group-affiliated companies in Korea: Intra-group resource sharing and internal business transactions. Academy of Management Journal, 43(3), 429-448.

Chen, K.Y., Elder, R.J. & Hsieh, Y.M. (2007). Corporate governance and earnings management: The implications of corporate governance best-practice principles for Taiwanese listed companies. Journal of Contemporary Accounting and Economics, 3(2), 73-105.

Cheung, Y., Rau, P. & Stouraitis, A. (2006). Tunneling, propping and expropriation: Evidence from connected party transactions in Hong Kong. Journal of Financial Economics, 82(2), 287-322.

Claessens, S., Djankov, S. & Lang, L. (2000). The separation of ownership and control in East Asian corporations. Journal of Financial Economics, 58(2), 81-112.

Coase, R.H. (1937). The nature of the firm. Economica, 4(16), 386-405.

Davis, P., Robinson, R.Jr., Pearce, J. & Park, S. (1992). Business unit relatedness and performance: A look at the pulp and paper industry. Strategic Management Journal, 13(5), 349-361.

Fan, J. & Lang, L. (2000). The measurement of relatedness: An application to corporate diversification. Journal of Business, 73(4), 629-660.

Fan, J., Guan, F., Li, Z. & Yang, Y. (2014). Relationship networks and earnings informativeness: Evidence from corruption cases. Journal of Business Finance & Accounting, 41(8), 831-866.

Farhan, N.H. & Almaqtari, F.A. (2023). Market value and related party's transactions: a panel data approach. Asian Journal of Accounting Research, 8(4), 411-424.

Fisman, R. & Wang, Y. (2010). Trading favors within Chinese business groups. American Economic Review, 100(2), 429-433.

Fooladi, M. & Farhadi, M. (2019). Corporate governance and detrimental related party transactions: Evidence from Malaysia. Asian Review of Accounting, 27(2), 196-227.

Gallery, G., Gallery, N. & Supranowicz, M. (2008). Cash-based related party transactions in new economy firms. Accounting Research Journal, 21(2), 147-166.

George, R. & Kabir, R. (2012). Heterogeneity in business groups and the corporate diversification-firm performance relationship. Journal of Business Research, 65, 412-420.

Gordon, E., Henry, E., Louwers, T. & Reed, B. (2007). Auditing related party transactions: A literature overview and research synthesis. Accounting Horizons, 21(1), 81-102.

Habib, A., Jiang, H. & Zhou, D. (2015). Related-party transactions and audit fees: Evidence from China. Journal of International Accounting Research, 14(1), 59-83.

Habib, A., Muhammadi, A.H. & Jiang, H. (2017a). Political connections, related party transactions, and auditor choice: Evidence from Indonesia. Journal of Contemporary Accounting and Economics, 13(1), 1-19.

Habib, A., Muhammadi, A.H. & Jiang, H. (2017b). Political Connections and Related Party Transactions: Evidence from Indonesia. International Journal of Accounting, 52(1), 45-63, https://doi.org/10.1016/j.intacc.2017.01.004.

Hasnan, S., Daie, M.S. & Hussain, A.R.M. (2016). Related party transactions and earnings quality: does corporate governance matter? International Journal of Economics & Management, 10(2), 189-219.

Hendratama, T.D. & Barokah, Z. (2020). Related party transactions and firm value: The moderating role of corporate social responsibility reporting. China Journal of Accounting Research, 13(2), 223-236.

Hoskisson, R. (1987). Multidivisional structure and performance: The contingency of diversification strategy. Academy of Management Journal, 30(4), 625-644.

Jian, M. & Wong, T. (2010). Propping through related party transactions. Review of Accounting Studies, 15(1), 70-105.

Jiang, G., Lee, C. & Yue, H. (2010). Tunneling through intercorporate loans: The China evidence. Journal of Financial Economics, 98(1), 1-20.

Johnson, S., La Porta, R., Lopez-de-Silanes, F. & Shleifer, A. (2000). Tunneling. American Economic Review, 90(2), 22-27.

Jorgensen, B.N. & Morley, J. (2017). Discussion of “Are related party transactions red flags?”. Contemporary Accounting Research, 34(2), 929-939.

Kang, M., Lee, H.Y., Lee, M.G. & Park, J.C. (2014). The association between related-party transactions and control–ownership wedge: Evidence from Korea. Pacific-Basin Finance Journal, 29, 272-296.

Khanna, T. & Palepu, K. (2000). Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. Journal of Finance, 55(2), 867-891.

Khanna, T. & Yafeh, Y. (2005). Business groups and risk sharing around the world. Journal of Business, 78(1), 301-340.

Khanna, T. & Yafeh, Y. (2007). Business groups in emerging markets: Paragons or parasites? Journal of Economic Literature, 45(2), 331-372.

Kohlbeck, M. & Mayhew, B.W. (2017). Are related party transactions red flags? Contemporary Accounting Research 34(2), 900-928.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A. & Vishny, R.W. (1998). Law and finance. The Journal of Political Economy, 106(6), 1113-1155.

Lee, T. (2019). Management ties and firm performance: Influence of family governance. Journal of Family Business Strategy, 10(2), 105-118.

Mackey, T.B., Barney, J.B. & Dotson, J.P. (2017). Corporate diversification and the value of individual firms: A Bayesian approach. Strategic Management Journal, 38(2), 322-341.

Markides, C. & Williamson, P. (1994). Related diversification, core competencies, and corporate performance. Strategic Management Journal, 15(2), 149-165.

Md Nor, H. & Ku Ismail, K.N.I. (2017). The Moderating Effects of Independent Directors' Human Capital on the Relationship between Related Party Transactions and Firm Performance: Evidence from Malaysia. Jurnal Pengurusan, 51(2017), 37-52, https://doi.org/10.17576/pengurusan-2017-51-04.

Mohd Ghazali, N.A. (2020). Governance and ownership in Malaysia: their impacts on corporate performance. Asian Journal of Accounting Research, 5(2), 285-298.

Nekhili, M. & Cherif, M. (2011). Related parties transactions and firm's market value: the French case. Review of Accounting and Finance, 10(3), 291-315.

Rahmat, M.M., Muniandy, B. & Ahmed, K. (2020). Do related party transactions affect earnings quality? Evidence from East Asia. International Journal of Accounting and Information Management, 28(1), 147-166, https://doi.org/10.1108/IJAIM-12-2018-0146.

Ramaswamy, K., Purkayastha, S. & Petitt, B. (2017). How do institutional transitions impact the efficacy of related and unrelated diversification strategies used by business groups? Journal of Business Research, 72, 1-13.

Riyanto, Y. & Toolsema, L. (2008). Tunneling and propping: A justification for pyramidal ownership. Journal of Banking & Finance, 32(10), 2178-2187.

Rumelt, R. (1982). Diversification strategy and profitability. Strategic Management Journal, 3(4), 359-369.

Ryngaert, M. & Thomas, S. (2012). Not all related party transactions (RPTs) are the same: Ex ante versus ex post RPTs. Journal of Accounting Research, 50(3), 845-882.

Schommer, M., Richter, A. & Karna, A. (2019). Does the diversification–firm performance relationship change over time? A meta-analytical review. Journal of Management Studies, 56(1), 270-298.

Shin, H.H. & Park, Y.S. (1999). Financing constraints and internal capital markets: Evidence from Koreanchaebols'. Journal of Corporate Finance, 5(2), 169-191.

Supatmi, S. & Primadani, I.A. (2021). Blockholder Ownership Impact on the Related Party Transactions to the Financial Industries. International Journal of Social Science and Business, 5(2), 226-233.

Wang, H.D., Cho, C.C. & Lin, C.J. (2019). Related party transactions, business relatedness, and firm performance. Journal of Business Research, 101, 411-425.

Wang, H.D. & Lin, C.J. (2013). Debt financing and earnings management: An internal capital market perspective. Journal of Business Finance & Accounting, 40(8), 842-868.

Wang, J. & Yuan, H. (2012). The impact of related party sales by listed Chinese firms on earnings informativeness and analysts' forecasts. International Journal of Business, 17(3), 258-275.

Wang, K. & Shailer, G. (2015). Ownership concentration and firm performance in emerging markets: A meta-analysis. Journal of Economic Surveys, 29(2), 199-229, https://doi.org/10.1111/joes.12048.

Wang, L. & Yung, K. (2011). Do state enterprises manage earnings more than privately owned firms? The case of China. Journal of Business Finance & Accounting, 38(8), 794-812.

Wang, W., Lu, W., Kweh, Q. & Siao, W. (2020). Related-party transactions and corporate performance following the adoption of International Financial Reporting Standards in Taiwan. Managerial and Decision Economics, 41(3), 371-379, https://doi.org/10.1002/mde.3106.

Wong, R.M., Kim, J.B. & Lo, A.W. (2015). Are related-party sales value-adding or value-destroying? Evidence from China. Journal of International Financial Management & Accounting, 26(1), 1-38.

Yatim, P., Kent, P. & Clarkson, P. (2006). Governance structures, ethnicity, and audit fees of Malaysian listed firms. Managerial Auditing Journal, 21(7), 757-782, https://doi.org/10.1108/02686900610680530.

Yeh, Y. & Woidtke, T. (2005). Commitment or entrenchment? Controlling shareholders and board composition. Journal of Banking & Finance, 29(7), 1857-1885.

Yeh, Y., Su, Y., Ko, C. & Lee, T. (2003). The impact of corporate governance on related party transactions. Review of Securities and Futures Markets, 15(4), 69-106.

Zhuang, J., Edwards, D. & Capulong, M.V.A. (2001). Corporate Governance & Finance in East Asia: A Study of Indonesia, Republic of Korea, Malaysia, Philippines and Thailand. Asian Development Bank, Manila.

## Appendix

**Appendix 1: Variable definitions**

| Variables | Symbols | Details | Reference |
|---|---|---|---|
| **Dependent variables** | | | |
| Financial Performance | ROA | Net income before extraordinary items scaled by total assets | Anderson and Reeb (2003), Al-Gamrh et al. (2020) as well as Wang et al. (2020) |
| **Explanatory variables** | | | |
| Related Party Transactions | RPT | Total amount of RPTs scaled by total assets | Al-Dhamari et al. (2018), Abigail and Dharmastuti (2022), Ben and Loukil (2023) as well as Rahmat et al. (2020) |
| Concentrated Ownership | CONOWN | Ownership percentage held by the top five shareholders | Zhuang et al. (2001) and Al-Jaifi (2017) |
| **Control Variables** | | | |
| Board independence | INDIR | Proportion of independent directors on the board of directors. | Al-Dhamari et al. (2018) |
| Firm size | SIZE | Natural log of a firm's total assets | Al-Dhamari et al. (2018), Ben and Loukil (2023) |
| Leverage | LEV | Total debts divided by total assets | Abigail and Dharmastuti (2022), Ben and Loukil (2023) |
| Operating cash flow | CF | Operating cash flow divided by total assets | Al-Dhamari et al. (2018), Ben and Loukil (2023) |
| Firms' growth | GROWTH | Market-to-book value | Al-Dhamari et al. (2018), Abigail and Dharmastuti (2022), Ben and Loukil (2023) |
| Return on assets | AGE | The natural log of firm age | Al-Dhamari et al. (2018) |
| Auditor size | BIG4 | A dummy variable that equals "1" if a firm is audited by a BIG4 audit firm and "0" otherwise | Habib et al. (2017) |

*Source: Author's own work.*