

Related Party Transactions and Firm Value: Evidence from Property Markets in Hong Kong, Malaysia and Singapore

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Abstract This paper offers new evidence as to how RPTs can be value enhancing for minority shareholders. In doing so, we address an ongoing theoretical tension in the related party transaction (RPT) literature by focusing on real estate investment trusts (REITs) in Asia. The empirical evidence is mixed in the corporate finance literature on whether RPTs create or destroy firm value. On average, REITs in our sample engaged in RPTs amounting to 5.4 % of total assets, annually, between 2003 and 2010. This is not a trivial amount and is nearly double the 2.8 % RPT rate for U.S. industrial firms. We identify three main channels for REIT RPTs: real estate asset acquisitions from related parties (57.4 %), income earned from related parties (22.2 %) and management fees paid to related parties (14.8 %). The identification strategy we employ relies on two distinct methodologies when examining RPTs and firm value: a multivariate regression approach and, secondly, an exogenous wealth effects test for RPT

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announcements. Overall, the results suggest that REIT managers and sponsors do not expropriate wealth from their minority shareholders through RPTs. We find evidence that an ad hoc acquisitions pipeline from sponsor to REIT generally drives the value and wealth proposition, although the impact could be reversed in a credit crisis.

Keywords Related party transactions · Firm value · Corporate governance · REITs

Introduction

Related party transactions (RPTs) are transactions between a firm and its own managers, directors, principal owners or affiliates. From the agency cost paradigm, RPTs are often viewed negatively because they provide direct opportunities for related parties, who are usually the controlling shareholders, to expropriate wealth from the minority shareholders. Firms with large controlling shareholders may channel corporate resources to projects that generate utility for the controlling owners but provide little benefits to minority owners (Claessens et al. 2006). An exceptional example of looting by controlling shareholders and managers is the Enron case, where special purpose entities were employed to manipulate income with the intention of deceiving investors.

RPTs that are abusive can alter the reliability of financial statements thereby reducing the effectiveness of contracts designed to preclude agency conflicts (Kohlbeck and Mayhew 2004). In the corporate finance literature, the expropriation of minority shareholders' wealth through the transfer of resources out of a company to its controlling shareholders is referred to as "tunneling" (Johnson et al. 2000b). Common forms of tunneling include related parties selling (buying) assets or services to (from) the controlled firms at an inflated (discounted) price, transferring company funds through loan guarantees and intercompany loans, and paying excessive executive compensation. The general conclusion in most academic studies is that RPTs are harmful to shareholders (Cheung et al. 2006, 2009; Berkman et al. 2009; and Jiang et al. 2010).¹ It is not clear whether real estate-related RPTs are detrimental to their minority shareholders. Our paper seeks to address this void in the literature.

Prior studies on REIT corporate governance, such as Hartzell et al. (2006), Bianco et al. (2007) and Bauer et al. (2010)), have argued standard corporate governance mechanisms (e.g., board, ownership and management structures), play a less critical role for REITs due to the uniqueness and strict rules regulating the industry. For example, the dividend payout rule significantly reduces the potential free cash flow problem faced by REITs. The tangibility of real estate assets also helps to mitigate agency costs associated with asset substitution. Moreover, REITs are subject to close monitoring and market discipline because of their heavy dependence on external funding. Nevertheless, it can be argued that there is room for continual improvement

¹ Cheung et al. (2006) document that Hong Kong listed companies announcing "connected transactions" earn significant negative excess returns. Cheung et al. (2009) observe that firms listed in Hong Kong enter deals with related parties at unfavorable prices compared to similar Arms Length Transactions (ALTs). They also note that corporate governance variables have limited impact on the pricing of the deals. Berkman et al. (2009) show that the issuance of related guarantees by Chinese firms has a negative impact on firm value and financial performance. Jiang et al. (2010) document how controlling shareholders abuse inter-corporate loans to siphon billions of RMB from hundreds of Chinese listed companies.

in the corporate governance environment of U.S. REITs. A case in point is the securities litigation involving The Mills Corporation.² Nonetheless, and to our knowledge, there are no studies examining the occurrence of RPTs within the context of REITs. To fill this gap in the literature, this study focuses on the RPTs of REITs operating in three Asian markets, namely Singapore, Hong Kong and Malaysia.

Over the last decade, REITs have spread widely to different parts of Asia. Unlike US REITs, which are mostly internally managed, Asian REITs are externally managed. The REIT manager is paid a fee in return for management services. More often than not, the REIT manager is wholly owned by the sponsor. The sponsor also retains a high stake in the newly listed REIT. This externally-managed model coupled with the entrenched position of the REIT manager creates a captive situation whereby minority shareholder interests are heavily controlled by the sponsor. Likewise, the sponsor continues to sell its assets and management services to the listed REITs while running its own parallel real estate businesses.³ Although such agency issues suggest an inverse relation between RPTs and firm valuation, popular press claims that investors recognize the value in a development pipeline offered by related parties. Specifically, sponsored-REITs with an ad hoc acquisition pipeline trade at lower yields (The Business Times, 2007). An economic explanation for this phenomenon is based on the efficient supply chain relation whereby affiliation with a strong conglomerate may be beneficial to a firm.

Overall, it is an empirical question whether RPTs have a negative or positive impact on firm value. To address this issue, our empirical investigation is carried out in two stages. First, we identify the frequency and the forms of RPTs undertaken by Asian REITs. Second, we examine the valuation impact of RPTs. While prior studies on tunneling by firms in East Asia have focused primarily on the expropriation of wealth by the controlling individuals through dubious channels such as inter-corporate loans (Jiang et al. 2010) and loan guarantees (Berkman et al. 2009), we do not find these practices to be common among Asian REITs. Instead, Asian REIT RPTs involve procurements with their sponsors, which can be in the form of recurrent management services or ad hoc acquisition of assets from the sponsor. Our results show that RPTs are generally beneficial to REIT shareholders as RPTs, on average, are associated with higher firm values.⁴ Specifically, the evidence suggests that REITs with a Sponsor

² From 2000 to 2005, the Mills Corporation (Mills), an owner and developer of “shopertainment” centers throughout the US and Europe, publicly reported the financial results of a rapidly growing, highly profitable company. Between 2000 and 2004, Mills’ publicly-reported net income increased nearly 700 %, from \$34.4 million to \$232 million, and its Funds from Operations (FFO) more than doubled, increasing from \$105.3 million to \$260.5 million. Over the 3 years, Mills’ common stock price increased by more than 140 %. In August 2006, Mills announced that it would be filing a restatement that would, at a minimum, reduce the company’s previously reported net income for the years 2003 to 2005 by \$210 million and would reduce its shareholders’ equity as of September 2005 by \$295 million. Mills also announced that the projected costs on its key development project – Meadowlands Mills, which had been described as the company’s “crown jewel” – would be approximately \$2 billion, an increase of \$800 million over what had been publicly projected earlier. With the disclosure, the price of Mills common and preferred stock fell precipitously, causing hundreds of millions of dollars in losses for investors (see Barrack et al. 2009).

³ In a report on Asia-Pacific REITs, the CFA Institute (2011) highlights that the sponsor is typically a participant in the real estate industry, for example but not limited to: (1) an owner of properties, (2) a property developer, (3) a fund manager, or (4) an operating business with an investment in property.

⁴ We acknowledge a point made by our MNM discussant, Dan French, who reminds us that our results hold “on average.” We examine the generalizability of our RPT conclusions in the final empirical section.

pipeline of acquisition are favored by investors. This is consistent with the growth story being capitalized into their stock prices. The results are robust after controlling for the financial crisis of 2008–09 and corporate governance characteristics. In addition, we provide further evidence of the RPT wealth proposition by examining the acquisition announcement effect. Our cross-sectional analysis of the cumulative abnormal returns shows that, on average, related party acquisitions contribute to firm value whereas the same is not observed with arms-length acquisitions. This result is robust even after controlling for firm and transaction characteristics.

In summary, the two main contributions of this paper are as follows. First, our identification strategy which is based on a multivariate regression model and an event study allows us to confront the causal inference issues in an RPT and firm value study. Second, our analysis highlights those conditions under which RPTs create value - an issue in the corporate finance literature where additional evidence is needed. The balance of the paper begins with a more in-depth review of the literature and institutional background. In the following sections we describe the data, and the empirical model. Next, the estimation results are discussed. The final section summarizes the key findings.

Literature Review and Institutional Background

A widely-held view is that the effectiveness of capital market discipline is limited in nations with less-developed capital markets. For this reason, it is not surprising that most of the empirical literature on tunneling has focused on the East Asia experience. A recent report by the Organisation for Economic Co-operation and Development (OECD 2009) claims that abusive RPTs, whether in the form of one-off material expropriation of wealth or the slow expropriation of wealth via continuous operational transactions, are one of the biggest corporate governance challenges facing Asian businesses. A major contributing factor is that many Asian enterprises are part of large business groups, or owned by controlling shareholders with large networks of personal interests. Examining the separation of ownership and control for 2,980 corporations in nine East Asian countries, Claessens et al. (2000) find that more than two-thirds of firms are controlled by a single shareholder and corporate control is enhanced through pyramid structures and cross-holdings among firms. Voting rights consequently exceed formal cash-flow rights.⁵ Managers of closely held firms in East Asian countries also tend to be relatives of the controlling shareholder's family.

The REIT organization form has spread widely in Asia since its introduction in September 2001. At the same time, the market environment in which Asian REITs operate is very different from that of their counterparts in the U.S. Specifically, most modern U.S. REITs are internally managed (see Capozza and Seguin 2000). In contrast, REITs in Asia are predominantly externally managed. Lecomte and Ooi (2013), Figure 1 shows the classic structure of an externally managed REIT which often results in a captive situation whereby the sponsor continues to sell assets and management

⁵ La Porta et al. (1999) record a high probability of being a single controlling owner though holding only 20 % of the stock. This shows that control of East Asian corporations can be achieved with significantly less than an absolute majority share of the stock.

services to the REIT. At the trust level, management of the REIT is outsourced to a third party management company, which is usually a wholly owned subsidiary of the sponsor. The management fee, based on assets under management (AUM), encourages the external manager to grow the trust's asset base through aggressive acquisitions. Moreover, the REIT manager earns an acquisition fee equivalent to 1 % of the value of the properties acquired. At the property level, the REIT outsources day-to-day operations of the properties to a property management agent, which is paid a separate management fee. An additional layer of agency issues arise because the property manager is normally wholly owned by the sponsor, who in many cases also actively continues to own, acquire, develop and incubate properties with the aim of selling them to the REIT at the appropriate time.⁶ Thus, in many instances, the REIT continues to acquire properties from the sponsor. These scenarios create potential conflicts of interest in terms of staff resources, the favorable treatment of sponsor properties over REIT properties,⁷ overpricing of services by the managers as well as property cherry-picking by sponsors (RiskMetrics Group 2009). On the fairness of the price relative to the value of assets being transferred from the controlling shareholders to the REIT, Ooi et al. (2011) do not find a significant difference in the abnormal returns associated with news of related and arms-length property acquisitions by Asian REITs.⁸

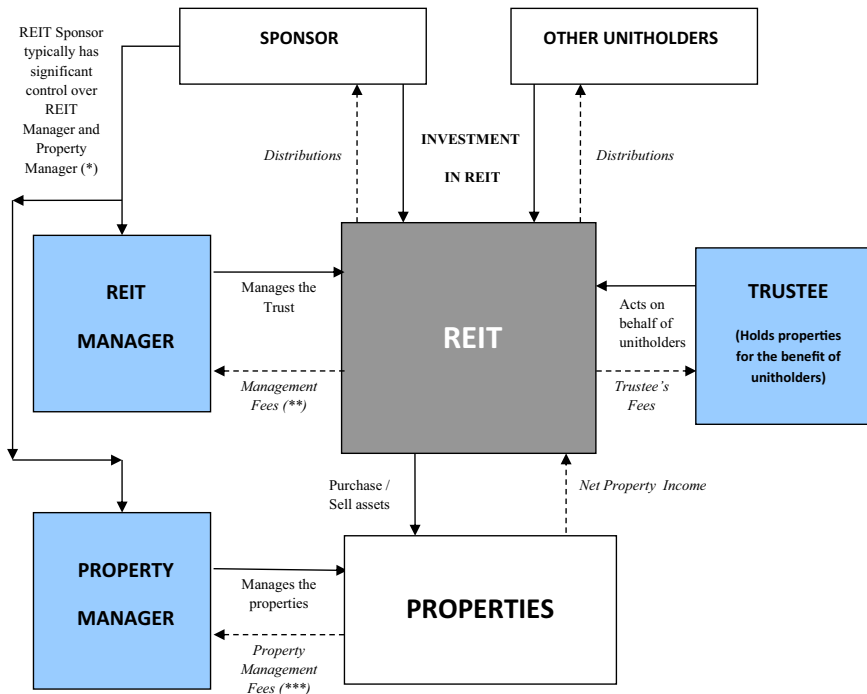
In practice, it is difficult to remove a REIT manager as well as the property manager because the sponsor usually retains a high percentage of the shares in the newly listed REITs. The data show that in a number of IPOs, the sponsor's stake is higher than 50 %. On average, a REIT sponsor in Asia retains 35.7 % of the shares in a newly listed REIT, which is higher relative to the 17.2 % in U.S. REIT IPOs (Hartzell et al. 2005). The externally managed model coupled with the entrenched position of the REIT managers exacerbates the principal-agent conflict leading to potential wealth expropriation of the minority shareholders through RPTs. A counter-argument would be that the high stakes retained by Asian sponsors is a credible signal by the sponsor of aligned interests with other shareholders (RiskMetrics Group 2009).

To address these potential conflicts of interests, REIT codes contain specific rules designed to protect minority shareholders and reduce the risk of wealth expropriation

⁶ The IPO prospectus of a REIT, for example, cautions "*The strategy and activities of the REIT may be influenced by the overall interests of the Sponsor. Moreover, the Sponsor may in the future, sponsor, manage or invest in other property funds which may also compete directly with the REIT. There can be no assurance that conflicts of interests will not arise between the REIT and the Sponsor in the future, or that the REIT's interest will not be subordinated to those of the Sponsor, whether in relation to future acquisitions of retail malls or in relation to competition for tenants.*"

⁷ In another REIT IPO prospectus, the following conflict of interest was flagged: "*Further, the Property Manager, a direct wholly owned subsidiary of the sponsor, has been appointed to manage the Properties as well as all future properties in Singapore to be acquired by the REIT. There can be no assurance that the Property Manager will not favor properties that the sponsor has retained in its own property portfolio over those owned by the REIT when providing leasing services to the REIT, which could lead to lower occupancy rates and/or lower rental income for the properties owned by REIT as a whole and this could adversely affect distributions to Unitholders.*"

⁸ It is important to note that Ooi et al. (2011) covers JREITs and SREITs until April 2007. In contrast, our current study covers SREITs, M-REITs and HK REITs from 2003 to 2010. While we are unable to observe the wealth effects of RPTs by JREITs that are excluded from this sample, our analysis on the sub-sample of acquisitions by SREITs shows that Related Acquisitions is insignificant in the first sub-period (pre-April 2007), which is consistent with Ooi et al. (2011), and weakly significant in the post-April 2007 sample, which suggests that the market is more receptive of RPTs in the latter period.



Source: Lecomte and Ooi (2013)

(*) The Sponsor has a significant holding in the REIT and usually owns the asset management and property management firms.

(**) Management fees include base fee, performance fees and acquisition / divestment fees.

(***) Property management fees might include leasing commissions.

Fig. 1 Typical Asian REIT Structure with Sponsor Stakeholder

through RPTs. For example, Singapore REITs (S-REITs) may buy or sell assets to related parties provided adequate disclosure is made in the prospectus or circular.⁹ In addition, two independent valuations are required, one of which must be commissioned independently by the trustee. The acquisition price should not be more than the higher of the two valuations, and the disposal must not be less than the lower of the two valuations. In addition, the trustee is required to furnish written confirmation that the transaction is on normal commercial terms and not prejudicial to the REIT shareholders. As added protection for the minority shareholders, prior approval from shareholders is required if the transaction value is more than 5 % of the firm's net asset value. However, transactions that are equal to or less than 3 % require only an immediate announcement to the regulators. In the case of Hong Kong REITs (HK-REITs), an announcement must be made for all RPTs if the value of the transaction exceeds HK\$ 1 million. Any interested parties in the transaction are required to abstain

⁹ The circular has to contain information on the identity of the related parties and their relationship with the REIT; details of the asset (services) to be acquired or sold including description of the assets, location, transaction prices, valuation and rental yield; and any other matters that may be relevant in the decision to approve the proposed transaction.

from voting (CFA Institute 2011).¹⁰ These stringent rules are designed to reduce the potential for abusive RPTs.

It should also be noted that the REIT market in Asia is still relatively young with the first listing of a Japanese REIT in 2001. The listing history of S-REITs began in 2002, HK-REITs in 2005, and Malaysian REITs (M-REITs) in 2005, as well. As a new entity without any track record, a REIT's main growth avenue is through acquisitions, either from third party property owners or from sponsors who also own properties. Given the competitiveness of the acquisition market, it is not surprising that REITs which are linked to sponsors who are also property developers and owners tend to be more active in acquisitions. Thus, while a close relationship with the sponsor may create agency issues, it also offers the young REIT a steady growth avenue. Moreover, during periods of tight capital such as in the aftermath of the global financial crisis, affiliation with a strong sponsor may also be beneficial to financially constrained firms.¹¹

The economic benefits of internal markets compared to external markets have been discussed in Coase (1960) and Williamson (1985) who highlight the role organizations play in reducing transaction costs in various markets. Two well known examples of conglomerate group affiliations in Asia are the *keiretsus* in Japan and *chaebols* in Korea. Hoshi et al. (1990) support the value of group affiliation in relieving financial constraints and overcoming costly financial distress in the case of Japan. Bae et al. (2002), on the other hand, observe that controlling shareholders of *chaebols* expropriate wealth from minority shareholders. In another study involving 2,000 firms from 9 East Asian economies, Claessens et al. (2006) find that relative to independent firms, group structures are associated with a greater use of internal factor markets through which the groups may allocate capital among firms within the group. They conclude that affiliation can lead to economic benefits especially when external financing is scarce and uncertain. Likewise, RPTs among REITs may provide benefits, especially in the case of young and fast growing firms. As such, the beneficial aspect of RPTs will be reflected in higher values for the firms concerned. In particular, we can think of two possible explanations as to why the “hold-up” costs for *RPT Acquisitions* is less than those for *ALT Acquisitions*: First, sponsored REITs do not have to compete with other prospective buyers because they normally have a right of first refusal to buy properties owned by their sponsor. Second, REITs are typically financially constrained since they have to disburse most of their earnings. Hence, their potential growth is dependent on the ability to secure additional financing to support external acquisitions. Because sponsors are also major shareholders of the REITs, they facilitate secondary equity offerings (SEOs) proposed by the REITs.

¹⁰ The threshold to inform the stock exchanges immediately of RPTs varies from 0.25 % of asset value in the case of Malaysia, to 1 % and 3 % for Hong Kong and Singapore, respective. Individual REITs may seek a general mandate from the shareholders to waive the requirement for immediate announcements as well as approval for material recurring RPTs, but they still have to disclose the RPTs in their annual reports. Although the threshold requirement suggests that a portfolio or single-asset ownership interest might be “unbundled” or divided to fall below the threshold, this is not apparent in practice because the average size of a single property acquisition would have crossed the threshold.

¹¹ OCBC Investment Research (2008) posits that sponsors play an important role by providing funding support for their sponsored REITs. Citing one incident where the key shareholder provided a new loan to help the subsidiary REIT refinance a bridge loan, the research house contends that strong sponsors could act as a “lender of last resort” for REITs, thus preventing an asset fire sale.

In summary, the existing evidence regarding RPTs on firm valuation is mixed and far from conclusive. In the context of Asian REITs, the strength of the trade-off is an issue to be determined empirically. On one hand, agency cost models predicts a negative relation between RPTs and value. Alternatively, efficient contracting models predict a positive relation. Specifically, based on Stein's (1997) argument that internal financial markets can provide benefits in allocating capital more efficiently when frictions in financial markets are severe, it is possible that young financially constrained REITs may enjoy higher firm values when they have the backing of a Sponsor.

Data and Methodology

The primary information source for individual REIT RPTs is the annual report. Related parties include the listed REITs' substantial shareholders, sponsors, directors, chief executive officer, manager and trustee. Under listing regulations, there is a minimum threshold to trigger the disclosure of an RPT. This threshold varies from S\$100,000 in Singapore, HK\$1 million in Hong Kong, to MYR 250,000 in Malaysia.¹² Information disclosures in the annual report are characterized according to the party or parties involved, type of transaction, and amount of transactions.

Table 1 presents descriptive statistics for our sample. In total, the sample consists of 127 firm-year observations covering 39 REITs from 2003 to 2010. We note that every REIT in the sample engages in some form of RPT during the reporting period. We discuss the variables in the order they are presented in Table 1. The Tobin's Q ratio of the sample firms ranges from 0.490 to 1.651 with a mean value of 0.902. While these values are lower than those observed for U.S. REITs, they are consistent with the Asian REIT market.

On average, the annual size of Asian REIT RPTs is 5.4 % of total assets. This is considerably higher than the 2.9 % reported for U.S. industrial firms (Ryngaert and Thomas 2012). The annual size of RPTs range from a minimum of 0.1 % to a maximum of 47.0 % of the REITs' total assets. The magnitude of the RPTs also varies from year to year.

As a proportion of all RPTs, the three main RPT channels for Asian REITs are acquisitions of real estate assets from related parties (57.4 %), income earned from related parties (22.2 %) and management fees paid to related parties (14.8 %). Other recurring RPTs (4.6 %) include expenses related to shared-services, such as accounting services and various consultancy fees including debt advisory and arrangement fees. Other non-recurring RPTs (1 %) include interest income, fees related to issuance of securities, banker guarantees and interest paid on loans granted by the sponsor.

We include a number of control variables in our analysis. These include both firm characteristics as well as firm-specific measures of corporate governance. REIT acquisitions that are arms-length transactions (ALTs) account for 6.0 % of total assets on an annual basis. The average REIT in our sample holds \$1.5 billion worth of assets. The mean age of the REITs is 32 months, which confirms their lack of track record. The

¹² In comparison, the threshold value in the U.S. is \$120,000. The exchange rate to US\$1 is HK\$7.752, S\$ 1.252 and MYR 3.266, respectively as at May 2014.

Table 1 Descriptive Statistics

| Variables | Definition | Mean | Std. Dev. | Min. | Max. |
|--|--|-------|-----------|-------|-------|
| Dependent Variable | | | | | |
| <i>Tobin's Q</i> | Market value of equity minus the book value of equity plus total assets scaled by total assets | 0.902 | 0.224 | 0.490 | 1.651 |
| Explanatory Variables | | | | | |
| <i>RPTs – All</i> | Related party transactions (RPT) scaled by total assets | 0.054 | 0.085 | 0.001 | 0.470 |
| <i>RPT Acquisitions</i> | Related party acquisitions scaled by total assets | 0.031 | 0.083 | 0.000 | 0.450 |
| <i>Fee-Based RPTs</i> | Manager, property manager and trustee's fees scaled by total assets | 0.008 | 0.004 | 0.000 | 0.018 |
| <i>Income RPTs</i> | Rental and interest income earned from related parties scaled by total assets | 0.012 | 0.022 | 0.000 | 0.107 |
| <i>Other RPTs</i> | Project management expenses, other miscellaneous RPTs & guarantees scaled by total assets | 0.003 | 0.007 | 0.000 | 0.071 |
| Control Variables – Firm characteristics | | | | | |
| <i>ALT Acquisitions</i> | Arms-length transaction (ALT) acquisitions scaled by total assets | 0.060 | 0.1112 | 0.000 | 0.507 |
| <i>REIT Size</i> | Total assets at the fiscal year (Million USD) | 1,459 | 1,605 | 53 | 7,590 |
| <i>REIT Age</i> | Number of months since IPO | 31.98 | 16.71 | 3.0 | 88.0 |
| <i>REIT Leverage</i> | Total debts scaled by total assets | 0.285 | 0.108 | 0.000 | 0.545 |
| <i>Profitability</i> | EBITDA scaled by total assets | 0.046 | 0.015 | 0.002 | 0.096 |
| <i>SIP</i> | Sponsor's investment properties scaled by total assets | 0.167 | 0.205 | 0.000 | 0.820 |
| Control Variables – Corporate governance | | | | | |
| <i>Board Size</i> | Number of directors on the board | 7.4 | 1.8 | 2 | 14 |
| <i>Independent Directors</i> | Independent board directors (%) | 44.67 | 11.37 | 28.57 | 82.0 |
| <i>Director Ownerships</i> | Shares owned by directors (%) | 0.50 | 2.20 | 0 | 18.5 |
| <i>Sponsor Ownership</i> | Shares owned by sponsors (%) | 35.70 | 20.70 | 0 | 76.40 |

This table provides summary statistics for the data employed in our analysis over the period 2003 to 2010. Total number of observations is 127

leverage and scaled earnings (i.e., EBITDA/total assets), means are 28.5 % and 4.6 %, respectively.¹³ In addition, we use Sponsor's investment properties scaled by assets (SIP) as a control variable for the pipeline of properties that may lead to RPT acquisitions between a Sponsor and a REIT.

The corporate governance measures and associated means values are Board Size (7.4), Independent Directors (44.7 %), Director Ownership (0.50 %) and Sponsor

¹³ An alternative measure of earnings used in the REIT industry is Funds from Operations (FFO). In a series of robustness tests, we examine the sensitivity of our results to using FFO in lieu of EBITDA. Although there is some variation between the two metrics in terms of statistical significance, the signs and overall results are robust. We report results here based on EBITDA as it is the standard in the corporate finance literature and is found in rigorous and scientific studies of REITs (e.g., Hartzell et al. 2006).

Ownership (35.7 %). The precise definitions of these control variables and additional descriptive statistics are shown in Table 1.¹⁴

In the next section, we discuss the results for our two-pronged identification strategy. Consistent with other studies that use a best-practices approach to research methodologies, we examine the relation between RPTs and firm value with multiple methods – specifically, we use a multivariate regression approach and an event study.

Results

RPTs and Firm Value

To test the relation between RPTs and firm value, we carry out regression analysis with the REIT valuation metric as the dependent variable in the models. REIT valuation is measured by the firm's Tobin's Q ratio, which is commonly used in corporate governance studies (Gordon et al. 2004; Kohlbeck and Mayhew 2004; Ryngaert and Thomas 2012; Chien and Hsu 2010; Lin et al. 2010). The leading explanatory variable is the RPT measure and we use a multivariate regression approach in the estimation. The null hypothesis states that RPTs do not impact firm value. If RPTs are value-destroying, a negative and significant relation between RPTs and Tobin's Q is expected. A significant and positive coefficient will support the alternative that RPTs are beneficial to firm value.

The estimation results are presented in Table 2. Note that all the regression models include fixed effects for property and country. Model 1 is the base model to measure the relation between *All RPTs* and the dependent variable, *Tobin's Q*. In Model 2, we decompose the single *All RPTs* variable into four separate components, namely *RPT Acquisitions*, *Fees-Based RPTs*, *Income RPTs*, and *Other RPTs*.¹⁵ The coefficients for the respective components help to distinguish whether all or only selected components of the RPTs impact firm value. *RPT Acquisitions* deserve special attention because of their high frequency, the large values involved, and the ad hoc nature of the deals.

Under the conflict of interests paradigm that RPTs are detrimental to shareholders, the coefficient for *All RPTs* would be negative and statistically significant. To the contrary, we observe a positive and statistically significant coefficient in Model 1. Thus, on average, firm value is higher for REITs with more RPTs. There are several possible explanations in the literature for the positive result. A recent study by Jian and Wong (2010) reveals that Chinese companies prop-up earnings via related party sales with their controlling shareholders. In other words, these firms use revenue from related party sales to meet regulators' earning targets to either maintain their listing status or to qualify for rights issues. Earnings management is unlikely to be the explanation for our observed result as most of the RPTs by Asian REITs involved cash outflow, rather than cash inflow.¹⁶

¹⁴ Table 1, by country, is available upon request from the authors. While cross-country variation in control variables are evident, the econometric approach address these potential effects.

¹⁵ We examine the VIF (i.e., variance inflation factor) across each of the RPT components. We find that the VIF is sufficiently low for each RPT variable so as to conclude that multicollinearity is not a concern in our results.

¹⁶ It should be noted that sponsors rarely provide financial assistance to REITs. In our sample, we only observed two REITs receiving loans from their sponsors and one REIT benefiting from the sponsor guaranteeing its loan.

Table 2 OLS Regression of RPT Acquisitions and Value

| | Model 1 | Model 2 | Model 3 |
|--|---------------------|--------------------|----------------------|
| Intercept | 0.681*** (13.99) | 0.678*** (8.61) | 0.261 (1.28) |
| <i>All RPTs</i> | 0.580* (1.87) | | |
| <i>RPT Acquisitions</i> | | 0.644** (2.00) | 0.772** (2.17) |
| <i>Fees-Based RPTs</i> | | -2.776 (-0.43) | -1.636 (-0.28) |
| <i>Income RPTs</i> | | -0.585 (-0.38) | -1.515 (-1.22) |
| <i>Other RPTs</i> | | 1.671 (0.74) | -1.688 (-1.14) |
| <i>ALT Acquisitions</i> | | 0.464*** (2.79) | 0.244 (1.30) |
| <i>REIT Size</i> | | | 0.203*** (3.41) |
| <i>REIT Age</i> | | | -0.109 (-1.31) |
| <i>REIT Leverage</i> | | | -0.006 (-0.04) |
| <i>REIT Profitability</i> | | | 3.341* (1.85) |
| <i>Sponsor's Investment Properties</i> | | | 0.112 (1.32) |
| <i>Credit Crisis</i> | | | -0.182*** (-4.35) |
| <i>Credit Crisis*RPT Acquisitions</i> | | | -1.240*** (-3.21) |
| <i>Credit Crisis*ALT Acquisitions</i> | | | -0.27 (-1.09) |
| Fixed Effects | Yes | Yes | Yes |
| No of Obs | 127 | 127 | 127 |
| R ² | 0.18 | 0.23 | 0.56 |

This table reports results of OLS regressions of RPT Acquisitions on Tobin's Q. The dependent variable is *Tobin's Q* measured as the market value of equity minus the book value of equity plus total assets divided by total assets. RPTs are transactions reported in the corresponding fiscal year. Other explanatory and control variables are defined as in Table 1. Coefficients for property-type and country fixed effects are not reported. Note that Total number of observations in each regression is 127. T-statistics are reported in the parentheses with robust standard errors. ***, **, and * refer to statistical significance at 1 %, 5 %, and 10 %, respectively

Furthermore, the coefficient for *Income RPTs* is statistically insignificant in Model 2. Kohlbeck and Mayhew (2004) offer another possible explanation by suggesting that

RPTs can be viewed as part of the compensation scheme, since firms that engage in RPTs may provide lower cash compensation to reflect the benefits to officers and directors of the RPTs. Again, this is unlikely to be the explanation for our results since the coefficient for *Fee-based Income* is not statistically significant in Model 2.

A third possible reason as to why RPTs are beneficial is that they facilitate “efficient contracting” arrangements in situations involving incomplete information. Ryngaert and Thomas (2012) argue that it makes business sense for firms to enter into contracts with related suppliers or franchisees due to better coordination and communication between the two parties. This arrangement also mitigates potential losses due to holdup problems in the contracting process or due to the break-up of contractual relationships. They contend “*When a subsidiary of a parent company is spun off to shareholders, it makes sense to have the former parent (and significant shareholder) continue to provide back-office support functions (as long as the former parent is the lowest cost provider).*” In support, the regression results of Model 2 show that the benefits of RPTs are attributable primarily to *RPT Acquisitions*.

One plausible reason why RPT acquisitions are beneficial is based on a “growth” story that is favored by stock analysts and investors. For this reason, we control for this alternative explanation of a high Tobin’s Q with four-firm specific variables, total property investment portfolio owned by the sponsor as well as the effect of the global financial crisis. The four firm-specific attributes include the control variables REIT size, leverage, age, and profitability as defined previously and in Table 1. *Sponsor Investment Properties* provides an indication of the strength of the pipeline of potential properties available for future acquisitions by individual REITs. Credit Crisis is defined as equal to 1 for years 2008 and 2009, and zero for all other years. We also interact Credit Crisis with Related Acquisitions and Arm’s Length Acquisitions to examine whether the relation between RPTs and firm valuation is consistent across different market conditions.

The coefficient for *Firm Size* is positive and significant at the 1 % level, which is consistent with the argument that large firms are also prized for their size due to scale economies and the higher quality of disclosure. Firm age and leverage, however, do not have a significant impact on firm valuation. As might be expected, the coefficient for *Credit Crisis* is negative and strongly significant. In the presence of these controls, the main result from Model 2 – i.e., a positive and significant relation between RPT Acquisitions and firm value – remains robust. Interestingly, the interaction variable *Credit Crisis*Related Acquisition* is negative and statistically significant, while the relationship between *Arm’s Length Acquisition* and firm value is not statistically significant. This set of results indicates that the relation between firm valuation and related acquisitions depends on market conditions. Consistent with the efficient contracting hypothesis, related acquisitions generally has a positive impact on firm value. However, related acquisitions has a net negative relationship with firm value during the crisis period. Our results relate to Johnson et al. (2000a) and Lemmon and Lins (2003) who find that controlling shareholders are more likely to expropriate wealth from minority shareholders during an economic crisis.

The preceding discussion addresses the alternative explanations to our efficient contracting interpretation of these results. Another important aspect of our findings is the economic significance. We focus on the three parameter estimates in Table 2, Model 3 that are statistically significant. The parameter estimate in Model 3 on *RPT*

Acquisitions implies that a one standard deviation increase in these acquisitions is associated with a 0.29 standard deviation increase in our measure of firm value, *Tobin's Q*. Likewise, a one standard deviation increase in *REIT Size* or *Profitability* is associated with respective increases of 0.44 and 0.23 standard deviation increases in Tobin's *Q*. These results suggest that the economic impact of *RPT Acquisitions* on firm value is at least comparable to that of a REIT's *Size* or its *Profitability*.

Corporate Governance and RPTs

A potential criticism of the prior analysis is that it does not control for the other corporate governance characteristics of the individual REITs. For example, high ownership by controlling shareholders may increase the ability of insiders to enter into transactions with less oversight (see Kohlbeck and Mayhew 2004). Thus, we expand our robustness analysis by incorporating several corporate governance variables in the regression model. For each REIT, we collect information on board size, number of independent directors, and percentages of shares owned by the directors and the sponsor. The descriptive statistics of the sample REITs, as presented in Table 1, were discussed previously.

Table 3 reports the corporate governance results. For easy reference, we repeat the estimates for Table 2, Model 3 in Model 1 of Table 3. We find that the previous results are robust after controlling for standard firm characteristics and corporate governance variables. As previously shown, we note that the coefficient on *RPT Acquisitions* remains statistically significant. At the same time, none of the corporate governance variables is significant, except *Sponsor Ownership*. This lack of significance is consistent with prior studies by Hartzell et al. (2006), Bianco et al. (2007) and Bauer et al. (2010) who contend that corporate governance is, perhaps, less important for REITs given the stricter rules of regulators and closer monitoring by capital providers. The negative coefficient for *Sponsor Ownership* is consistent with the argument in Kohlbeck and Mayhew (2004) that high ownership by controlling shareholders is associated negatively with firm value.

Wealth Effects of Related Acquisitions

Our analysis on the role of RPTs has thus far involved examining REIT value at the firm-level. In this section, we extend the analysis to examine the wealth effects surrounding property acquisition announcements. An *ex post* returns-based event study approach is well-regarded in corporate finance as a means of addressing reverse causality and potential endogeneity. For this reason, it serves as an identification strategy. Finally, we examine the cross-sectional determinants of the cumulative abnormal return (CAR).

The data collection for this analysis involved a careful and extensive review of all news on acquisitions made by REITs in Singapore, Hong Kong and Malaysia. The event date is taken as the first day the announcement appears. If the announcement is made on a non-trading day, the next trading day after the announcement is used as the event day. We exclude from the sample closely clustered acquisitions because the returns surrounding the event window cannot be isolated. In the case of acquisition announcements involving more than one property, we aggregate the value of the

Table 3 Robustness Tests with Corporate Governance Effects

| | Model 1 | Model 2 |
|---------------------------------------|----------------------|----------------------|
| Intercept | 0.261 (1.28) | 0.552** (2.14) |
| <i>RPT Acquisitions</i> | 0.772** (2.17) | 0.906*** (2.81) |
| <i>Fees-Based RPTs</i> | -1.636 (-0.28) | 1.504 (0.22) |
| <i>Income RPTs</i> | -1.515 (-1.22) | -1.872 (-1.21) |
| <i>Other RPTs</i> | -1.688 (-1.14) | -1.035 (-0.65) |
| <i>ALT Acquisitions</i> | 0.244 (1.30) | 0.218 (1.08) |
| <i>REIT Size</i> | 0.203*** (3.41) | 0.221*** (3.40) |
| <i>REIT Age</i> | -0.109 (-1.31) | -0.129 (-1.58) |
| <i>REIT Leverage</i> | -0.006 (-0.04) | -0.100 (-0.59) |
| <i>Profitability</i> | 3.341* (1.85) | 2.202 (1.21) |
| <i>Sponsor Investment Properties</i> | 0.112 (1.32) | 0.242** (2.45) |
| <i>Credit Crisis</i> | -0.182*** (-4.35) | -0.157*** (-3.90) |
| <i>Credit Crisis*RPT Acquisitions</i> | -1.240*** (-3.21) | -1.419*** (-3.86) |
| <i>Credit Crisis*ALT Acquisitions</i> | -0.27 (-1.09) | -0.369 (-1.51) |
| <i>Board Size</i> | | -0.146 (-0.78) |
| <i>Independent Directors</i> | | -0.182 (-1.04) |
| <i>Director Ownership</i> | | -1.754 (-1.04) |
| <i>Sponsor Ownership</i> | | -0.963** (-2.48) |
| Fixed Effects | Yes | Yes |
| No of Obs | 127 | 127 |
| R ² | 0.56 | 0.59 |

The dependent variable is *Tobin's Q* measured as the market value of equity minus the book value of equity plus total assets divided by total assets. The explanatory and control variables are defined as in Table 1. Total number of observations in each regression is 127. Coefficients for property-type and country effects are not reported. T-statistics are reported in the parentheses with robust standard errors. ***, **, and * refer to statistical significance at 1 %, 5 %, and 10 %, respectively

acquired properties and treat them as a single event. Twelve events were omitted due to overlapping periods, or incomplete information on the seller's profile. The final sample comprises 157 acquisition announcements, out of which 38 transactions (24.2 %) involved acquisitions from related parties. The remaining 119 transactions (75.8 %) involved arms-length acquisitions.

Abnormal returns surrounding the acquisition announcements are estimated using the standard market model event study methodology. The excess return is estimated using the multivariate regression model:

$$R_{jt} = \alpha_j + \beta_j R_{mt} + \sum_{k=1}^{K_j} \gamma_{ek} D_{ek} + \varepsilon_{jt}, \quad (1)$$

where R_{jt} and R_{mt} are the period- t returns for REIT j and the market portfolio, respectively. Daily returns for the market indices and the individual REITs were obtained from Bloomberg. For the market index, we employ the All Singapore Equities Index for Singapore, the Hang Seng Index for Hong Kong and the KLCI Index for Malaysia. These indices are the most comprehensive price indexes comprising all stocks listed on the respective exchanges. The coefficients α_j and β_j are the least squares estimates of the intercept and slope, respectively, and ε_{jt} is the error term. K is the number of events included in the estimation, while D_{ek} is a dummy variable equal to one on the e -th day of the k -th event window and zero for all other dates. To test the significance of the measured abnormal returns, we construct the J2 statistics for the e -th day of all event windows. This approach follows the methodology adopted by Ooi et al. (2011).

Table 4 reports CARs for the 3-day period surrounding the acquisition announcement. Overall, we find that acquisition announcements (i.e., announcements for the combined RPT and ALT acquisitions), result in a positive stock price adjustment for the REITs. Specifically, the 3-day window $CAR_{(-1,+1)}$ is statistically significant with a magnitude of +0.459 %. This result is consistent with the notion that REIT acquisitions are good news for shareholders (see Allen and Sirmans 1987; Campbell et al. 2001, 2003; Ooi et al. 2011). Furthermore, the results for the partitioned announcements reveal a strong contrast between RPT and ALT acquisitions. Specifically, the CAR for RPT acquisitions is significant at +1.413 %, whereas the CAR for ALT acquisitions is 0.154 % and not statistically significant. The related party result is robust to a 4-day window as well. Together these results support the conclusion that the wealth effects of REIT acquisitions are positive for RPT acquisitions. Furthermore, the wealth effect analysis substantiates our earlier findings that RPTs positively impact REIT value. The results may be interpreted as consistent with the efficient contracting theory.

Next, we extend our event study analysis by examining cross-sectional factors that could influence the abnormal returns. This approach controls for potentially spurious correlations and is intended to offer additional insight. We begin with a set of control variables as presented and defined in Table 5. The total number of observations with data is 126. In addition to REIT size, leverage and age, we add each REIT's cumulative return 1 month prior to the announcement date, the number of properties acquired per transaction, and the size and price premium of each transaction.

Table 6 shows the results for the cross-sectional analysis of CAR regressed on an RPT Acquisition indicator named *Related* (0,1).¹⁷ Model 1 is a univariate regression

¹⁷ The Table 6 results for the four-day event window are essentially the same and are available upon request.

Table 4 Abnormal returns surrounding acquisition news

| | No. of Observations | CAR _(-1, +1) | CAR _(-2, +1) |
|------------------|---------------------|-------------------------|-------------------------|
| All Acquisitions | 157 | 0.459 % *** | 0.190 % |
| RPT Acquisitions | 38 | 1.413 % *** | 1.287 % ** |
| ALT Acquisitions | 119 | 0.154 % | -0.089 % |

The reported figures are mean values for 157 property acquisitions by REITs in Singapore, Hong Kong and Malaysia between 2003 and 2010. CAR_(-1, +1) refers to the cumulative abnormal returns for a 3-day window covering 1 day before and after the event date. CAR_(-2, +1) refer to the cumulative abnormal returns for a 4-day window covering 2 days before and 1 day after the event date. *** and ** refer to statistical significance at 1 % and 5 %, respectively

with fixed effects. The coefficient estimate for *Related* (0,1) is positive and significant. Likewise, Table 6, Model 2 – where we have included the full set of cross-sectional control variables – shows that RPT acquisition announcements reflect a significant and positive wealth effect based on investor expectations. This wealth effect is explained by the relatedness of the parties and, with the exception of recent stock price performance and REIT Age, the wealth effect is not explained by the characteristics of the REIT or the transaction. Once again, our results point to the efficient contracting thesis as the basis for why RPT Acquisitions positively impact the firm value of REITs.¹⁸

As a final piece of additional analysis, we investigate alternative explanations to ‘efficient contracting’ for the observed relationship between shareholder wealth and Related Acquisitions. While Ooi et al. (2011) attribute the positive abnormal returns surrounding announcements of property acquisitions to economies of scale and better management, they do not differentiate between properties acquired from a Sponsor and properties acquired from unrelated, or third, parties. We, therefore, are careful not to generalize the findings in Ooi et al. (2011) to our case of *Related Acquisitions* vs *ALT Acquisitions*. Our analysis nevertheless shows that the transaction size of Related Acquisitions is larger than ALT Acquisitions. Moreover, REITs that engage in Related Acquisitions tend to employ less debt in their capital structure. It could also be argued that due to information asymmetry, the transaction cost in real estate acquisitions may be reduced if the interest between sellers and buyers is more aligned.¹⁹

To explore whether the positive wealth effects associated with Related Acquisitions may be attributed to economies of scale, information asymmetry, leverage, or favorable pricing, we augment Model 2 with four new interaction variables, namely *Related* (0,1)**Transaction Size*, *Related* (0,1)**Sponsor Ownership*, *Related* (0,1)**REIT Leverage*, and *Related* (0,1)**Premium* in the regression model. The results which are reported in Model 3, Table 6 are revealing. First, the coefficient for Related Acquisitions is not statistically significant, suggesting that the more nuanced interaction

¹⁸ Following the suggestion of our MNM discussant, Dan French, we also partition all RPT Acquisition announcements into positive- and negative-CAR subsamples and examine both a difference in means and medians for the two groups across all control variables shown in Tables 1 and 5. The only statistically significant differences are seen in a higher *Performance* measure and lower *Transaction Size* for the positive-CAR group. All other variables are not statistically different across the two groups. We thank Dan for suggesting this analysis and we defer any additional analysis on the characteristics of value-creating RPTs and REITs to future research.

¹⁹ We thank one of the anonymous reviewers for suggesting this point of clarification.

Table 5 Descriptive Statistics for CAR-based Analysis

| | Definition | Mean | Std. Dev | Min. | Max. |
|---------------------------|--|--------|----------|--------|----------|
| Dependent Variable | | | | | |
| <i>CAR</i> ($-1,+1$) | Cumulative abnormal returns for a 3-day window covering 1 day before and after the event date | 0.003 | 0.030 | -0.082 | 0.118 |
| Control Variables | | | | | |
| <i>Related</i> ($0,1$) | Indicator variable equals to one for related party acquisitions and zero for arm-length acquisitions | 0.246 | 0.432 | 0 | 1 |
| <i>REIT Size</i> | Total assets at the fiscal year (Millions USD) | 734.01 | 701.15 | 28.13 | 4,158.30 |
| <i>REIT Age</i> | Number of years since IPO | 1.98 | 1.32 | 0 | 8 |
| <i>Performance</i> | Cumulative REIT stock price return 1 month prior to the event date | 0.011 | 0.076 | -0.207 | 0.215 |
| <i>No. of Properties</i> | Total number of properties that are acquired on the same day | 2.50 | 5.52 | 1 | 60 |
| <i>Transaction Size</i> | Target properties' transaction price (in USD million) | 93.73 | 187.93 | 2.75 | 1,602.50 |
| <i>Premium</i> | Ratio of transaction price over valuation of the target property | 0.966 | 0.058 | 0.64 | 1.000 |

This table provides summary statistics for the data employed in the event study over the period 2003 to 2010. Total number of observations is 126

terms may explain the wealth effect of RPTs. Second, the positive and statistically significant interaction term with *Leverage* and *Sponsors Ownership* suggest that the impact of Related Acquisitions on REIT stock returns flows through the financing and alignment of interest channels. The negative coefficient for the interaction term with *Transaction Size* is not consistent with an economies of scale explanation. Both the coefficients for *Premium* and its interaction term with *Related* ($0,1$) are not statistically significant.

In fact, a joint test for the statistical significance of the five *Related* ($0,1$) variables affirms the overall positive relation between the wealth effect and RPTs. The null that the five *Related* ($0,1$) variables sum to zero is rejected at the 1 % significance level (i.e., $F(2,107)=7.65$). We summarize this finding as follows and in support of the efficient contracting argument. Although the main effect of *Related* ($0,1$) is no longer significant, the marginal effects provide intuitively appealing support for the efficient contracting argument. Specifically, *REIT Leverage* – a proxy for financial constraint – and *Sponsor Ownership* – a proxy for acquisition pipeline – are significant and positive, while *Transaction Size* – a proxy for economies of scale – is significant and negative. *Premium* is not statistically significant for institutional reasons, as previously discussed, that require acquisition prices to closely approximate appraised value. Overall, and while there are caveats and limitations to this analysis, the results points to this sample of related party acquisitions as being value enhancing for REITs.

Table 6 CAR cross-sectional analysis

| | Model 1 | Model 2 | Model 3 |
|---|---------------------|--------------------|----------------------|
| Intercept | -0.022** (-2.17) | 0.152 (1.03) | 0.219 (1.42) |
| <i>Related (0,1)</i> | 0.031** (2.43) | 0.033** (2.23) | -0.264 (-1.41) |
| <i>REIT Size</i> | | 0.002 (0.05) | -0.006 (-0.14) |
| <i>REIT Age</i> | | -0.094* (-1.72) | -0.061 (-1.18) |
| <i>REIT Leverage</i> | | 0.013 (0.36) | -0.018 (-0.45) |
| <i>Performance</i> | | 0.087* (1.80) | 0.073 (1.54) |
| <i>No of Property</i> | | 0.009 (1.42) | 0.007 (1.24) |
| <i>Transaction Size</i> | | -0.012 (-1.40) | -0.007 (1.24) |
| <i>Premium</i> | | -0.063 (-0.88) | -0.088 (-1.11) |
| <i>Sponsor Ownership</i> | | -0.199 (-0.89) | -0.245 (-1.07) |
| <i>Related (0,1)*Transaction Size</i> | | | -0.045*** (-2.64) |
| <i>Related (0,1)* Sponsor Ownership</i> | | | 0.387** (2.47) |
| <i>Related (0,1)*REIT Leverage</i> | | | 0.411** (2.03) |
| <i>Related (0,1)*Premium</i> | | | 0.232 (1.33) |
| <i>Fixed effects</i> | Yes | Yes | Yes |
| <i>No of Obs</i> | 126 | 126 | 126 |
| <i>R²</i> | 0.44 | 0.51 | 0.59 |

This table reports results of OLS regressions of announcement abnormal returns on firm and property level variables for a sample of 126 property acquisition announcements (comprising 31 related party acquisitions and 95 arm-length acquisitions). The dependent variable is CAR_(-1, +1). Our key variable of interest is *Related (0,1)*, an indicator variable that equals to one for RPT or related-party acquisitions and zero for ALT or arms-length acquisitions. *REIT Size*, *REIT Age*, and *REIT Leverage* are defined as in Table 1. *Performance* is the cumulative REIT stock price return 1 month prior to the event date. *No of Property* is the natural logarithm of total number of properties that are acquired on the same day. *Transaction Size* is the natural logarithm of target property's purchase price (in USD million). *Premium* is the ratio of purchase price over valuation of the target property minus one. Coefficients for year, country and firm dummies are not reported. T-statistics are reported in the parentheses with robust standard errors. ***, **, and * refer to statistical significance at 1 %, 5 %, and 10 %, respectively

Conclusions

This study examines related party transactions (RPTs) and the impact on firm value for a sample of Hong Kong, Malaysian and Singaporean REITs. The data show that the average size of RPTs reported annually by REITs listed in these markets is 5.4 % of total assets. This is much higher than the 2.8 % reported for U.S. industrial firms. The three main channels for RPTs by REITs are acquisitions of real estate assets from related parties (57.4 %), income earned from related parties (22.2 %) and management fees paid to related parties (14.8 %). The second and third channels are recurring transactions, while the first channel occurs on an ad hoc basis.

The empirical analysis reveals a positive value effect for the combination of all RPT channels; while, further analysis shows that this result is driven by the RPT acquisition channel. Overall, the results are robust to changing market conditions and cross-sectional variations in corporate governance. Our empirical design and identification strategy includes both a multivariate regression approach as well as an event study. The latter reinforces the exogenous or causal inference evident in the former approach. Furthermore, we find that variations in REIT characteristics and transaction attributes provide additional intuition as to the source of these value enhancing transactions.

Overall, our findings are consistent with an efficient contracting thesis regarding a select set of Asian REITs, RPT acquisitions and firm value. Any causal inferences drawn in this study are attributable to the natural experiment associated with the REIT-Sponsor relationship in this part of the world. We contend that the validity and robustness of these results are sound based on our empirical approach. While we consider our findings to be generalizable, we leave that empirical task to future research.

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References

- Allen, P. R., & Sirmans, C. F. (1987). An analysis of gains to acquiring firm’s shareholders: the special case of REITs. *Journal of Financial Economics*, 18(1), 175–184.
- Bae, K.-H., Kang, J.-K., & Kim, J.-M. (2002). Tunneling or value added? Evidence from mergers by Korean business groups. *Journal of Finance*, 57(6), 2695–2740.
- Bauer, R., Eichholtz, P., & Kok, N. (2010). Corporate governance and performance: the REIT effect. *Real Estate Economics*, 38(1), 1–29.
- Barrack, Rodos, & Bacine. (2009). In Re The Mills Corporation Securities Litigation. *News Room* (07/16/2009). Attorneys at Law’s Website: <http://www.barrack.com/emIn-Re-The-Mills-Corporation-Securities-Litigationem.html>.
- Berkman, H., Cole, R. A., & Fu, L. J. (2009). Expropriation through loan guarantees to related parties: evidence from china. *Journal of Banking and Finance*, 33(1), 141–156.
- Bianco, C., Ghosh, C., & Sirmans, C. F. (2007). The impact of corporate governance on the performance of REITs. *Journal of Portfolio Management*, 33(5), 175–191.

- Campbell, R. D., Ghosh, C., & Sirmans, C. F. (2001). The information content of method of payment in mergers: evidence from real estate investment trusts (REITs). *Real Estate Economics*, 29(3), 361–387.
- Campbell, R., Petrova, D. M., & Sirmans, C. F. (2003). Wealth effects of diversification and financial deal-structuring: evidence from REIT property portfolio acquisitions. *Real Estate Economics*, 31(3), 347–365.
- Capozza, D. R., & Seguin, P. J. (2000). Debt, agency, and management contracts in REITs: the external advisor puzzle. *Journal of Real Estate Finance and Economics*, 20(2), 91–116.
- CFA Institute. (2011). *Asia-Pacific REITs – Building Trust through Better REIT Governance*
- Cheung, Y. L., Rau, P. R., & Stouraitis, A. (2006). Tunneling, propping, and expropriation: evidence from connected party transactions in hong Kong. *Journal of Financial Economics*, 82(2), 343–386.
- Cheung, Y. L., Qi, Y. H., Rau, P. P., & Stouraitis, A. (2009). Buy high, sell Low: How listed firms price asset transfers in related party transactions. *Journal of Banking and Finance*, 33(5), 914–924.
- Chien, C. Y., & Hsu J. C. S.. (2010). *The Role of Corporate Governance in Related Party Transactions*. Working paper, National Yunlin University of Science and Technology
- Claessens, S., Djankov, S., & Lang, L. H. P. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics*, 58(1–2), 81–112.
- Claessens, S., Fan, J. H. P., & Lang, L. H. P. (2006). The benefits and costs of group affiliation: evidence from East Asia. *Emerging Markets Review*, 7(1), 1–26.
- Coase, R. H. (1960). The problem of social costs. *Journal of Law and Economics*, 39(Oct), 1–44.
- Gordon, E. A., E. Henry., & D. Palia. (2004). *Related Party Transactions: Associations with Corporate Governance and Firm Value*. Working paper, Rutgers University
- Hartzell, J. C., Kallberg, J., & Liu, C. H. (2005). REIT IPOs and the underlying real asset market. *Real Estate Economics*, 33(1), 27–50.
- Hartzell, J. C., Sun, L., & Titman, S. (2006). The effect of corporate governance on investment: evidence from real estate investment trusts. *Real Estate Economics*, 34(3), 343–376.
- Hoshi, T., Kayshap, A., & Scharfstein, J. (1990). The role of banks in reducing the costs of financial distress in Japan. *Journal of Financial Economics*, 27(1), 67–88.
- Johnson, S., Boone, P., Breach, A., & Friedman, E. (2000a). Corporate governance in Asian financial crisis. *Journal of Financial Economics*, 58(1–2), 141–186.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2000b). Tunneling. *American Economic Review*, 90(2), 22–27.
- Jiang, G. H., Lee, C. M. C., & Yue, H. (2010). Tunneling through intercorporate loans: the china experience. *Journal of Financial Economics*, 98(1), 1–20.
- Jian, M., & Wong, T. J. (2010). Propping through related party transactions. *Review of Accounting Studies*, 15(1), 70–105.
- Kohlbeck, M. & Mayhew, B. (2004). *Agency Costs, Contracting, and Related Party Transactions*. Working paper. University of Wisconsin-Madison
- La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, 54(2), 471–517.
- Lecomte, P., & Ooi, J. T. L. (2013). Corporate governance and performance of externally managed Singapore REITs. *Journal of Real Estate Finance and Economics*, 46(4), 664–684.
- Lemmon, M. L., & Lins, K. V. (2003). Ownership structure, corporate governance, and firm value: evidence from East Asian financial crisis. *Journal of Finance*, 58(4), 1445–1468.
- Lin, W. Y., Liu, Y. A., & Keng, I. (2010). Related party transactions, firm performance and control mechanisms: evidence from Taiwan. *International Research Journal of Finance and Economics*, 35, 82–98.
- OCBC Investment Research. (2008). S-REITs – Credit market freeze raises refinancing concerns. 9 October.
- OECD. (2009). Guide on Fighting Abusive Related Party Transactions in Asia. *Corporate Governance Series*
- Ooi, J. T. L., Ong, S. E., & Neo, P. H. (2011). The wealth effects of property acquisitions: evidence from REITs. *Real Estate Economics*, 39(3), 487–505.
- RiskMetrics Group. (2009). *As Safe as Houses – Examining the Corporate Governance of Listed Real Estate Investment Trusts in Singapore*. November
- Ryngaert, M., & Thomas, S. (2012). Not All related party transactions (RPTs) are the same: Ex-ante vs Ex-post RPTs. *Journal of Accounting Research*, 50(3), 845–882.
- Stein, J. C. (1997). Internal capital markets and the competition for corporate resources. *Journal of Finance*, 52(1), 111–133.
- Williamson, O. E. (1985). *The Economic Institutions of Capitalism*. New York: The Free Press.