IRES2011-029

IRES Working Paper Series

Information Asymmetry and Organizational Structure: Evidence from REITs

Yongheng Deng, Maggie (Rong) Hu, and Anand Srinivasan

Aug 2015

Information Asymmetry and Organizational Structure: Evidence from REITs[1]

Yongheng Deng
Department of Real Estate, Department of Finance,
and Institute of Real Estate Studies,
National University of Singapore
e-mail: ydeng@nus.edu.sg

Maggie (Rong) Hu
School of Banking and Finance
UNSW Business School
University of New South Wales, Australia
Email: m.hu@unsw.edu.au

Anand Srinivasan
Department of Finance
NUS Business School
National University of Singapore
e-mail: bizas@nus.edu.sg

August 31, 2015

[1] We would like to thank discussants and participants at European Financial Management Association Meeting (EFMA) 2012, Asian Financial Association Conference 2012, Financial Management Association Conference 2012, and FSU/UF Critical Issues in Real Estate Symposium 2014 for helpful comments and suggestions.

Information Asymmetry and Organizational Structure: Evidence from REITs

Abstract

We test for the differences in information asymmetry across two organizational forms (external and internal) in the REIT industry. We find significant differences with external REITs being significantly more transparent relative to internal REITs, and these differences are reflected in the loan contract terms and loan syndicate structure of loans made to these two types of REITs. We find that the relatively more transparent externally advised REITs are offered more favourable loan contracts in terms of lower loan rates and lower likelihood of collateral requirement. Further, loans to external REITs have syndicates that are larger in size and the lead lender retains a smaller portion of the loan, reflecting lower information asymmetry.

Key words: external advisor; Real Estate Investment Trust (REIT); organizational structure; loan contract terms; information opacity; certification effect

JEL classification: G20, L85, L00, L22

1. Introduction

Publicly traded REITs in the U.S. adopt two principal organizational forms – an internal REIT, where the REIT advising and property management are performed within the REIT itself by its own staff, and an external REIT where the advisory and property management role is performed by an external advisor. Extant literature documents that these external advisor arrangements provide poor performance due to conflicts of interest between the external advisor and the REIT shareholders (Capozza and Seguin 2000, Ambrose and Linneman 2001).[2] Nevertheless, close to 20% of traded REITs in the US continue to have the external organization structure. Further, in other countries such as Singapore, a majority of REITs are externally managed. This suggests that there are some potential advantages of this organizational form that might have been neglected in the literature.

This paper empirically investigates one potential benefit of the external organizational form by examining differences in information asymmetry, loan contract terms (both price and non-price terms) and the syndicate structure of loans to external and internal REITs. Our investigation is motivated in part by a recent model by Sun (2010) who argues that the external organizational form may be optimal in some cases, as the external advisor may exert larger effort due to reputational concerns. Such reputational concerns are likely to be of greater importance for smaller REITs, where information asymmetries are more important. In addition, Chan, Erikson and Wang (2003) document

[2] There is a large literature that shows a strong impact of corporate governance on REIT valuation. Hartzell, Kallberg and Liu (2008) show a valuation effect during IPOs as well as long-run operating performance differences in REITs based on corporate governance. Other evidence on the importance of REIT corporate governance includes Campbell, Ghosh and Sirmans (2005), Hartzell, Sun and Titman (2006), Bauer, Eichholtz and Kok (2010), Anglin, Edelstein, Gao and Tsang (2012), and Deng, Devos, Rahman and Tsang (2015).

that an external REIT may be restricted in choosing risky projects, thus, the chance of risk shifting is lower. This would also result in a lower degree of information asymmetry with capital market participants. Since the ex-ante likelihood of risk shifting may be higher in smaller firms, this would suggest that smaller REITs should be more likely to choose the external form. Consistent with this, the empirical analysis of our sample also finds that internal REITs are less than half the size of external REITs.[3]

We next proceed to the main analysis of this paper, namely examining differences in loan contract terms (both price and non-price) across these two types of REITs. Our use of loan contract terms is motivated in part by some recent papers in banking that suggest that loan contract terms reflect informational asymmetry and moral hazard (Sufi, 2007; Bharath et al, 2011). An additional benefit of focusing on loan contract terms is that it provides an examined benefit of continuing in the external form – that a lower cost of capital for loans (due to lower information asymmetry) may offset some of the documented disadvantages of being an external REIT.

We study four loan contract terms - the interest rate, whether or not a loan is collateralized, the number of covenants and the maturity of the loan. To the extent that the external REITs have a lower information asymmetry and risk shifting, this should result in lower interest rates, and fewer collateral and covenant restrictions (Diamond, 1984; Boot, Thakor and Udell, 1990). Further, to the extent that maturity structure of debt is determined by risk shifting (Flannery, 1986), this should also lead to longer debt maturities for external

[3] A REIT industry report prepared by Deloitte (2008) suggests that the optimal organizational form for smaller REITs is an external advisory arrangement while larger REITs should be internally advised. In this report, the principal benefits of being external are stated to be reaping the benefits of economies of scale in management of properties by the external advisor, as well as taking advantage of the expertise of the external advisor in a particular geographical location or industry.

REITs. To test this, we use a large sample of loans made to publicly traded U.S. REITs using the LPC Dealscan database. This database has been widely used in the banking literature for studying issues in banking for industrial firms (Drucker and Puri, 2005; Santos and Winton, 2008), although most extant studies using this data exclude financials and REITs.

We find broad support for the notion that loan contract terms reflect lower information asymmetry for external REITs. In particular, external REITs obtain lower loan rate of around 15 basis points. Given the average loan spread of around 170 basis points, this suggests an 8% discount in the loan rate. As found with the measures of information asymmetry, this result is surprising because the size of the external REITs in the sample is only 56% in terms of mean and 80% in terms of median relative to the size of internal REITs. In most studies, loan rates and collateral decrease with size, reflecting the usually lower credit risk associated with larger firms. Likewise, we find that external REITs have a significantly lower likelihood of collateral constraints and smaller number of covenants. However, we do not find any difference in the maturity structure of loans. Consistent with the literature on relationship lending, prior relationships between lenders and borrowers result in significantly lower interest rates. Relationships are also associated with lower collateral and lower maturity, but have no impact on covenants.

Next, we examine the syndicate structure of loans made to internal and external REITs. Sufi (2007) documents that information asymmetry also impacts the structure of the syndicate in case of syndicated loans. In particular, he shows that greater information asymmetry leads to smaller syndicates as well as retention of a greater share of the loan by the lead lenders. Since most of the loans in the LPC database are also syndicated, using the

syndicate structure provides an alternative test for the notion that information asymmetry differs across these two organizational forms. We find that external REITs have larger syndicates as well as lower retention of the loan share by lead lenders, consistent with the notion that they have lower information asymmetry.

The above results may be driven by differences in credit risk of internal and external REITs. Our baseline specifications included credit risk controls in the form of ratings at the loan level. Nevertheless, it is possible that there are other unobservable risk factors that cause this difference. We use a change in laws pertaining to REITs as a natural experiment to test our results. Specifically, in 2001, REIT law was changed to reduce the mandatory payout ratio from 95% to 90%.[4] This change effectively increased agency costs for all REITs. In this situation, the advantage to being externally advised should become larger, due to the greater capacity of internal REITs to do risk shifting. We re-estimate our baseline results interacting a post Modernization Act dummy variable with the external status. Consistent with our main argument, the advantage of being externally advised increases significantly after the REIT modernization act.[5]

To summarize, extant studies on external REITs, which focus mainly on the conflict of interests between the external advisors and the shareholders of external REITs, may have ignored the benefits of enhanced transparency associated with being an external REIT. Our paper attempts to fill this gap by exploring in detail the potential advantage of external REIT organizational structure from the perspective of enhanced monitoring and loan contract terms.

[4] The REIT Modernization Act was passed by the U.S. Congress in 1999. However, this provision was made effective only after 2001.
[5] We thank Benjamin Schiek, discussant of our paper, for this excellent suggestion.

Although the setting of our study applies principally to real estate, it also has implications for a larger literature that examines the link between organizational form and risk shifting. In particular, as documented by Esty (2001), risk shifting incentives of organizational forms differ significantly across mutual and stock insurance companies. Our study shows that such differences may also significantly impact information asymmetries, and these differences are priced in the market for loans.

The rest of this paper is organized as follows: in Section 2, we provide some institutional background about internal and external REITs and develop our hypotheses. In Section 3, we provide details on the data collection and sample construction. In Section 4, we conduct univariate analysis. In Section 5, we conduct multivariate analysis of loan contract terms and syndicate structure. Lastly, in Section 6, we present our concluding remarks.

2. Institutional Background, Related Literature and Hypotheses Development

This section provides the institutional background of REITs in the US, focusing on the development of these two organization forms – internal and external. Next, we survey academic literature on the relative performance of these two organizational forms. Lastly, we develop the hypotheses on differences in loan contract terms across these two organizational forms that would be consistent with the difference in information asymmetry.

2.1 Evolution of REIT organizational form

Chan, Erikson and Wang (2003) provide a detailed analysis of the REIT industry as well as the differences between internal and external REITs. This section draws on insights from their study. Because REITs were designed to be passive investment vehicles, they were prohibited from actively trading their properties in the open market or directly managing them. Instead, they were required to either employ professional property management firms or simply lease their properties. The effect of these legal requirements is to separate the fiduciary responsibilities of REIT management from the provision of tenant services.

In 1986, the US Congress changed the tax code to allow REITs to manage their own portfolios. After the passage of Tax Reform Act in 1986, REITs were allowed to "directly select, hire, and compensate those independent contractors who will provide customary services that may be provided by a REIT in connection with the rental of real property, rather than hiring an independent contractor to hire other independent contractors."

REITs that continued to be managed by external advisors were classified as external REITs, whereas those that integrated the advising function within the organization were classified as internal REITs. Anecdotal evidence suggests that internal REITs pursue more aggressive growth strategies via the acquisition and development of properties.[6] The information content in their operating performance, business strategy, and expansion plan is expected to be less available to the public relative to external advised REITs. Beginning in 1987, many REITs switched from externally advised and hired internal professional

[6] See, for example, Capozza and Seguin (2000), Ambrose and Linneman (2001) and Chan, Erikson and Wang (2003).

management. New internally-advised REITs were also formed by entrepreneurs needing access to capital to build or restructure portfolios of properties.

2.2 Literature Review on External REIT Puzzle

The coexistence of two REIT forms is puzzling since the internally-advised REITs are believed to be more efficient than the old-style externally-advised REITs. John Haahr, the managing director of the real estate group at Kemper Securities, says that self-managed REITs are the only ones he will consider. "Picking self-managed REITs is our way of making sure that the money stays in the company," said Haahr.[7] Several leading REIT experts predicted that self-advised and self-managed types of REITs would dominate the industry (Linneman, 1997). This view was driven by the belief that internally advised REITs, similar to operating companies, would be able to improve profits by expanding revenues or controlling expenses. Capozza and Seguin (1998) found that during the period from 1985 to 1992, internally-advised REITs outperformed externally-advised REITs by more than 7% annually.

The above arguments are convincing – however, we observe few conversions from external to internal advisors after 1996. As we will see, externally advised REITs still comprise around 20% of the listed REITs in our data sample. The paper by Sun (2010) provides a detailed theoretical analysis of potential advantages of being external in terms of advisor reputation. To the extent that smaller REITs derive greater benefits from having better reputation, this implies that smaller REITs are more likely to be externally managed.

[7] As quoted by Katherine Anderson, "All the Right Moves," *Journal of Portfolio Management*, Nov 1994.

2.3 Hypotheses

Next, we develop hypotheses on the impact of these differences in organizational form and possible difference in information asymmetry on loan contract terms. Modern banking theory has relied largely on information asymmetry and moral hazard to develop theories for the existence of banks as well as explanation for extant loan contract terms (Diamond, 1984; Ramakrishnan and Thakor, 1984). These suggest that greater transparency of borrowers should lead to lower loan rates, due to the reduction in ex ante information risk (e.g., Diamond and Verrecchia, 1991; Baiman and Verrecchia, 1996). In our context, these studies would suggest that banks are more likely to charge a lower loan rate to external REITs, because of their enhanced transparency. This reasoning leads to the first hypothesis.

Hypothesis 1: *Spreads should be lower for external REIT loans.*

However, a typical loan provides a number of other contractual ways in which a lender can impact the "cost" of a loan to a borrower. Besides the loan rate, bank loan contracts also include non-price terms, such as collateral requirements, restrictive covenants, and duration of the loan.

Some theoretical models of collateral based on moral hazard (Boot, Thakor and Udell, 1991; Stulz and Johnson, 1985) posit that high risk borrowers are more likely to post collateral. On the other hand, models of collateral based on adverse selection (Bester, 1985; Besanko and Thakor, 1987) posit that collateral should be posted by low risk borrowers. A preponderance of empirical evidence suggests that high risk borrowers tend to post more

collateral (Berger and Udell, 1990; Jimenez, Salas and Saurina, 2006). To the extent that this is also applicable to REITs, one should expect lower collateral and lower information asymmetry, and therefore a lower collateral requirement, for external REITs. Accordingly, our second hypothesis is as follows:

Hypothesis 2: *The likelihood of collateral should be lower for external REIT loans.*

The debt covenant literature finds that banks use covenants to improve the ex post monitoring of credit quality, although the covenants also reduce borrower investment flexibility (Smith and Warner, 1979; Graham et al., 2008). Further, as Rajan and Winton (1995) show, covenants also give lenders greater ex-post incentives to monitor; thus, they are more likely to be used for borrowers that require such monitoring. The implication is that the more opaque the firm is, the more likely that a greater number of covenants are used to monitor the firm to improve transparency and prevent excessive risk taking. This leads to the third hypothesis.

Hypothesis 3: *The number of covenants should be lower for external REIT loans.*

The literature on loan maturity is two-fold. On the one hand, Flannery (1986) suggests that debt maturity would increase as borrower quality improves, implying that debt maturity is a downward sloping function of the risk of the borrower. On the other hand, Diamond (1991) predicts that maturity is a non-monotonic function of the borrower's risk rating with the shortest maturities for the lowest and highest risk ratings. Empirically,

Berger et al. (2005) find support for Flannery (1986). This suggests the following hypothesis in terms of maturity of the loans taken by external versus internal REITs.

Hypothesis 4: *Loan maturity should be higher for external REIT loans.*

Next, we examine the effect of REIT organizational status on loan syndicate structure. Unlike a traditional bank loan, which typically involves a single creditor, a syndicated loan combines a group of lenders. A lead arranger originates the loan and performs due diligence and monitoring, and the participant banks fund part of the loan (Esty, 2001). In such loans, in addition to the information symmetry problem between lenders and borrowers (Holmstrom and Tirole, 1997), there is an element of moral hazard between the lead arrangers and other participant lenders. In particular, the lead arrangers have an incentive to shirk monitoring responsibilities, especially when more intense monitoring is required, as the monitoring efforts are costly and unobservable, and the lead arrangers only own part of the loan (Ivashina, 2009). Ex ante, participant banks should take these incentives into account and demand that a greater fraction of the loan be held by the lead arrangers the more opaque the borrowing firm is. Sufi (2007) tests the above model and finds that loan syndicates are structured to minimize this moral hazard problem. In particular, he finds that lending syndicates tend to be smaller and lead banks retain a larger share of the loan for borrowers requiring high levels of monitoring. In our setting, given the higher information asymmetry of internal REITs, there would be a greater moral hazard problem between leader arranger and participant banks. Hence we hypothesize that participant banks would require the leader arranger to retain higher shares. In addition,

fewer banks would be willing to join, resulting in a smaller syndicate size for loans with internal REIT borrowers. This leads to the last two hypotheses on syndicate structure and lead lender share differences between external and internal REITs.

Hypothesis 5: *Lead lender share should be lower for external REIT loans and higher for internal REITs.*

Hypothesis 6: *Syndicate size should be larger for external REIT loans, and smaller for internal REITs.*

3. Data and Sample Selection

Our sample includes all U.S. REITs for which data is available in the Loan Pricing Corporation (LPC) DealScan Database and COMPUSTAT. Data on individual loan facilities is obtained from the DealScan database maintained by LPC. LPC has been collecting information on loans to large U.S. corporations primarily through self-reporting by lenders, SEC filings, and its staff reporters. The primary sources of data for DealScan are attachments to SEC filings, reports from loan originators, and the financial press.

While the LPC database provides comprehensive information on loan contract terms (LIBOR spread, maturity, collateral, etc.), it does not provide much information on borrowers, such as borrowers' financial information, etc. We manually match the borrowers in the LPC database with the merged CRSP and COMPUSTAT database using a text-matching algorithm outlined in Engelberg and Sankaraguruswamy (2007). The output from the algorithm is verified by hand matching. For those REITs in the LPC database that provide no matches using the algorithm, we hand match directly to CRSP and

COMPUSTAT. We then exclude those REITs that are mortgage or hybrid REITs. This results in a total sample of 196 REITs.

To obtain the advisor status of each REIT, we searched manually in LexisNexis and SEC filings for the company's business description. A REIT is classified as internally advised if it is found to be internally advised or internally managed in its SEC filings or related news articles. Out of the 196 equity REITs, we are able to classify 159 as internal REITs and 35 as external REITs. The remaining REITs were excluded from our analysis.

We then use the COMPUSTAT database to extract data on accounting variables for each REIT. To ensure we only use accounting information that is publicly available at the time of the loan, we employ the following procedure: For those loans made in calendar year t, if the loan activation date is 6 months or later than the fiscal year ending month in calendar year t, we use the data of that fiscal year. If the loan activation date is less than 6 months after the fiscal year ending month, we use the data from the fiscal year ending in calendar year t-1.

Following Drucker and Puri (2005), we use the LPC reported "All-in-Spread-Drawn" (AISD) as our measure of the cost for a loan. AISD is the coupon spread over LIBOR on the drawn amount plus any recurring annual fee. For loans not based on LIBOR, LPC converts the coupon spread into LIBOR terms by adding or subtracting a constant differential reflecting the historical averages of the relevant spreads. The AISD enables comparisons across loans, independent of the underlying fee and rate structure. [8]

[8] As of 8/31/2002, the differentials used in the calculation of AIS reported by LPC are: +255 basis points (BP) for the prime rate, +3 BP for the commercial paper rate, -34 BP for the T-bill rate, -18 BP for bankers' acceptance rate, –6 BP for the rate on CDs, and 0 BP for the federal funds rate, cost of funds rate and money market rate. Hubbard et al. (2002) show that replacing these constants with time-varying differentials based on year-specific average spreads has a minimal effect on any pricing implications.

As mentioned earlier, we use collateral requirements, covenants, and maturity as the non-price terms of a loan. The dummy variable "collateral" equals 1 if the loan facility was secured and 0 otherwise. Since the LPC database has a missing value for the secured field for a large number of observations, we assume that observations that have a missing value are uncollateralized.[9] We use the total number of covenants in the loan contracts, which is computed as the total number of financial covenants and general covenants, as our measure of covenant strictness (Bradley and Roberts, 2004). The facility maturity is calculated as the number of months between the facility start date and the maturity date. These four variables, i.e., loan spread, collateral, covenants, and loan maturity, are used as the principal measures of the borrowing firms' benefits or costs in a loan contract.

A key focus of our paper is to analyze the information asymmetry across these two REIT organizational forms. At the same time, there is also a literature on relationship lending that analyzes the impact of relationships on information asymmetry. One finding from the relationship literature is that borrowers and lenders form long-term relationships that impact non-price as well as price terms of a loan contract. To adequately control for this, as well as analyze loans for lender-specific variables, we focus on the loan-lender pair as our unit of analysis. This allows us to precisely analyze the impact of relationships on loan spreads, as well as adjust for lender-specific variables on the pricing of loan contracts. We will henceforth use this as the unit of analysis and will be referring to a lender-loan pair as a "loan". Another advantage of this specification is that firms with unobservably higher information asymmetry should form stronger relationships. To the extent that our

[9] This is consistent with prior literature in this field such as Bharath et al (2011).

controls for information asymmetry are not complete, selection of borrowers into strong relationships with lenders allows us to control for this unobservable heterogeneity.

Table 1 Panel A presents a longitudinal view of our sample of observations with the yearly distribution of 3,102 observations, among which 2,398 are for internal REITs, and 704 for external ones. The number of observations drops sharply in years 2008 and 2009, which is consistent with a sharp decrease in loan syndications in these years due to the credit crisis.[10] Panel B reports the unique number of REIT firms by year and advisor status.

Table 2 Panel A-C presents the summary statistics for all the key variables, including loan characteristics, such as loan facility amount and spread, as well as borrower characteristics, such as total assets and leverage ratio. The average (median) loan spread in our sample is about 173 basis points (140 basis points), and average (median) loan amount is about USD 361 million (250 million). Average (median) loan maturities are 34 (36) months. About 20% of the loan facilities are collateralized and about 60% have covenants, with 5 covenants per loan on average.

We also provide descriptive statistics for internal and external REIT samples in Panel B and Panel C. There are approximately three times more loans taken by internal REITs relative to external REITs, roughly consistent with the fractions of these REIT types in the overall sample. Comparing Panel B to Panel C, we find that external REITs are typically smaller in size, consistent with the finding in Capozza and Segiun (2000). Despite

[10] In a press release, Thomson Reuters LPC reported that loan issuance in the U.S. for 2008 came in at only $763.98 billion, which is down 55% from 2007 and that there was contraction in all industry sectors. See "U.S. Loan Market Review: 2008 ends with lending grinding to a halt" New York, December 30, 2008 (Thomson Reuters LPC).

their larger size, internal REITs experienced higher loans rates, stricter collateral requirements and shorter loan maturities. The average loan spread is 174.3 basis points for internally advised REITs and 167.3 basis points for externally-advised REITs, respectively. About 22% of internal REIT loans have a collateral requirement, whereas only 15% of external REIT loans are collateralized.

4. Univariate Analysis

Univariate tests of differences in key loan characteristics and borrower characteristics between internal REIT and external REIT loans are presented in Panel D of Table 2. The last three columns report differences in means and the associated t-statistics and z-statistics. The first part presents the test results for the key loan characteristics. The statistics provide strong evidence that external REITs enjoy significantly better price as well as non-price terms. The difference in mean loan spreads is 7 basis points and is statistically significant at the 10% level, while the difference in median loan spread is 30 basis points and is significant at the 1% level. On average, about 21.6% of internal REIT loans are collateralized compared to 15.1% external REIT loans that are collateralized. This difference is significant at 1% level. Thus, the univariate results on loan spreads and collateral are consistent with hypotheses 1 and 2 respectively, that is, external REITs obtain a lower loan rate and are less likely to provide collateral. It is interesting to note that externally advised REITs are associated with more covenant requirements, contrary to the predicted sign in Hypothesis 3. The difference in mean maturity is insignificant contrary to Hypothesis 4; however, the median maturity of external REIT loans is higher than that of internal REITs, which is consistent with the predicted sign.

The principal variables we use to capture the syndicate structure are the total number of lenders in the syndicate and the percentage of the loan kept by the lead arranger, following Sufi (2007). On average, lead arrangers retain 33% of the total loan amount for loans taken by external REITs, compared with 37% for internal REIT loans. The difference of lead lender share is about 4% and is significant at 1% level. There is also a significantly greater number of lenders in external loan syndicates. Thus, the difference in syndicate concentration documented here is also consistent with external REITs being more informationally transparent than internal REITs as stated in hypotheses 5 and 6, respectively.

While the univariate tests provide preliminary evidence that external REITs are offered more favourable loan terms, and that syndicate structures are significantly different across these two loans, these results do not take into account potentially significant differences in borrowing firms' characteristics. For example, banks may prefer to offer better loan contract to borrowers with a track record of strong financial performance. To examine this, we tabulate differences between internal and external REITs in terms of firm characteristics. The results are reported in bottom part of Table 2 Panel D. The average size (as measured by book value of assets) of an internal REIT ($ 3,365 million) is almost twice the average size of an external REIT ($ 1,909 million). This difference in size is significant at the one percent level. The two types of REIT borrowers also differ with respect to leverage and market to book ratios. To better examine the effects of REIT organizational structure on loan contract terms, we employ multivariate tests in the following section.

5. Multivariate Analysis

The results in the previous section suggest that loan contract terms and syndicate structures differ significantly across internal and external REITs. To account for differences in loan facility and borrower specific characteristics, this section conducts multivariate analysis to examine if the differences persist when other controls are added.

5.1 Organizational Form and Loan Contract Terms

We hypothesize that external REITs are expected to have lower loan rates, lower collateral requirements, and fewer loan covenants if the greater transparency of this organizational form is reflected in loan contract terms. Thus, our main dependent variables are the loan contract terms, including loan rates, an indicator variable for collateral requirement, number of covenants imposed, and loan maturity. Our key independent variable is a dummy variable which indicates whether the REIT organizational structure is external. Specifically, the regression model is as follows:

$$Loan\ Contract\ Terms_{\ i,j}(i.e., AISD, Collateral, Covenants, and\ Maturity)$$
$$= \beta_0 + \beta_1(External) \quad + \sum \beta_i(Loan\ Characteristics) +$$
$$\sum \beta_j(Borrower\ Characteristics) + \sum \beta_k(Other\ Controls) + \varepsilon_{i,j} \qquad (1)$$

where the i and j subscripts indicate loans and firm, respectively, and β is a vector of parameters.

We estimate the empirical loan rate model using OLS method; for collateral, the regression estimation is done using Probit; and ordinal Logit model is used for covenants regression because the number of covenants is a discrete natural number. We use the log of the total assets, leverage ratio, and the market to book ratio as control variables for

borrower characteristics. Following Bradley and Roberts (2004) and Degryse and Ongena (2005), we also use the term spread and default spread to control for macroeconomic risk factors. Term spread is the difference between the yield on a one- and a ten-year Treasury bill. Default spread is defined as the difference between the yield on Moody's seasoned corporate bonds with Baa ratings and the yield on 10-year U.S. government bonds.

We use the logarithm of loan amount, collateral, loan concentration, number of covenants, and the logarithm of maturity as control variables for loan characteristics in the loan rate regression. Following Berger and Udell (1990), Elsas and Krahnen (1998) and Degryse and Ongena (2005), we assume that collateral and loan rate are determined sequentially, with the collateral decision preceding the interest rate determination. Thus, collateral is used as an independent variable in the loan rate regression, but not vice versa. The detailed definitions of most of the variables can be found in Appendix A. We also include year, loan type, loan purpose, and lender fixed effects.

5.1.1 Effect on Loan Rate

Panel A of Table 3 reports estimation results for the loan rate regression. We find that the spread on external REIT loans is around 15 basis points lower than spread on internal REIT loans, after accounting for borrower and loan characteristics. This estimate is actually larger than the 7 basis points difference in loan spreads in the univariate test from Table 3 which essentially reflects the fact that external REITs are smaller in firm size and therefore should, ceteris paribus, pay higher interest rates on loans.

Other variables in this regression have signs consistent with prior literature. For example, larger loans have lower spreads reflecting economies of scale at loan origination. Larger borrowers have lower spreads, and borrowers with greater leverage have higher spreads. To the extent that market-to-book can be interpreted as a proxy for credit risk (Fama and French (1993)), a negative coefficient for this variable implies that credit risk is lower for such firms. Collateral has a positive impact on loan spreads consistent with the notion that more risky borrowers are more likely to be required to post collateral as well as pay higher loan rates. The positive impact of collateral on loan rates has been documented in many other empirical studies (Berger and Udell, 1990; Bharath et al., 2011). Consistent with Degryse and Ongena (2005) who find that a one basis point parallel shift of the term spread implies a positive 0.4 basis point shift in the loan rate, we find that term spread and default spread are positively related with loan rates in our sample when year fixed effect is excluded. The negative effect of External dummy on AISD holds in all different specifications. Thus, hypothesis 1 is supported.

5.1.2 Effect on Non-Price Loan Contract Terms

Next we focus on three specific non-price terms: collateral requirements, the number of covenants, and loan maturity. Turning to Panel B of Table 3, external REIT loans are associated with about 30% reduction in collateral requirement, as the external dummy is negatively related to collateral requirement at 1% significance level. This result is also consistent with Bester (1985), who suggests that borrowers with less severe information asymmetries should have reduced collateral requirements.

We control for loan amount, maturity, leverage, market-to-book, and loan concentration (measured as the fraction of the loan amount to the sum of existing debt plus the loan amount). These control variables have similar effects on collateral and loan spread. We find that larger loans are associated with lower collateral requirement, which suggests that banks offer larger loans to less risky borrowers and impose less stringent collateral requirement as well. Leverage is found to be positively associated with collateral requirement; consistent with the notion that highly leveraged firms have greater incentives to increase the riskiness of assets. Banks take this into account ex ante and set stricter collateral requirements as compensation for risk.

Loan concentration [Loan Amount/(Existing Debt + Loan Amount)] is expected to be positively associated with collateral requirements. If a particular loan facility is a significant portion of the firm's debt, it is more likely to be secured (Berger and Udell, 1990; Boot, Thakor, and Udell, 1991; Dennis, Nandy, and Sharpe, 2000). However, loan concentration is significant only in one specification.

Table 3 Panel C reports the ordinal Logit regression result on the number of covenants in loan contracts. The coefficient on the external dummy is -0.16 and significant at the 1% level, suggesting the existence of fewer covenants for external REIT loans. This result is consistent with the notion that banks use restrictive covenants to improve the ex post monitoring of borrowers' credit quality (Smith and Warner, 1979; Rajan and Winton, 1995; Bradley and Roberts, 2004; Graham et al., 2008). We also control for other firm and loan specific variables. Loan amount is positively associated with covenant requirements, which suggests that banks impose more restrictions on larger loans. Collateral is positively

associated with the number of covenants, as explained earlier in part B. Larger firms are less subject to covenant restrictions, consistent with Kim et al. (2011).

Table 3 Panel D reports the regression results for loan maturity. The dependant variable Log(Maturity) is the natural log of the stated maturity of the loan facility (measured as length in months between facility activation date and maturity date). We model the relationship between debt maturity and REIT organizational status after controlling for variables that are known determinants of debt maturity (see Barclay and Smith, 1995; Guedes and Opler, 1996; Barclay, Marx, and Smith, 2003). We control for firm size, loan amount, leverage, collateral, market-to-book, and asset maturity. Following Guedes and Opler (1996), we define asset maturity as (Net PP&E/Assets)(Net PP&E/Depreciation), where PP&E stands for property, plant and equipment. The intuition behind this variable is that firms may try to match their debt maturity to asset maturity. Myers (1977) argues that firms schedule debt repayments to match the decline in the value of assets in place as a way to lower the agency costs of debt. Thus, firms with more long-term assets in place can support more long-term debt. Maturity matching allows firms to extend debt maturity without significantly increasing the agency costs of debt. Similarly, Diamond (1991) argues that liquidity risk is reduced by financing long-term assets with long-term debt.

However, in all specifications, the external dummy is not significant. This suggests that at least in this setting, debt maturity is not impacted by information asymmetry. It may also be consistent with the notion that the relationship between loan maturity and firm risk is non-monotonic (Diamond (1991)). Further, contrary to the maturity matching theory, the coefficients on asset maturity are negative in model 3 and model 4. However, it should be

noted that there is a large reduction in the number of observations due to missing variables when we construct the asset maturity variable.

Overall, the results of this sub-section provide broad support for hypothesis 1 to hypothesis 3 that loan contract terms do reflect lower information asymmetry. Although we do not find support for hypothesis 4, the theoretical literature has conflicting predictions for the impact of information asymmetry on loan maturity which may be one potential explanation for this result.

5.2 Effect on Loan Syndicate Structure

Next, we examine the effect of being externally advised on lead lender shares and syndicate size. Specifically, we estimate the following equation:

$$Syndicate\ Structure_i = X_i\beta + External_i\gamma + Year\ + Loan\ Characteristics_i \qquad (2)$$

Following Sufi (2007), we sort the sample by sales revenue and then create the dummies for the smallest one-third, middle one-third, and largest one-third of firms in the sample by sales. We then interact the logarithm of loan amount with the mid and large dummies. The estimation result is presented in Table 5.[11] The dependent variable in model 1 is Lead Lender Share, defined as the percentage of the loan retained by the lead lender, and the dependent variable in model 2 is syndicate size, defined as the total number of lenders in the loan syndicate. Our key independent variable of interest is the external dummy, which captures the difference in information opacity in REIT borrowers. We

[11] The variables of lead lender share and syndicate size are not disclosed by LPC data for many data observations. Hence, this regression has a much smaller number of observations relative to the loan contract regressions.

control for firm characteristics and loan characteristics, such as the logarithm of firm sales (which is the logarithm of sales revenue), a dummy variable for rated firms and an indicator for term loan, as well as year, loan purpose and lender fixed effects.

In both models, the external dummy is significantly related to the degree of concentration within the syndicate. We find that there are more lenders in the syndicate, and the lead arranger holds fewer shares of the loan. The effect of the external dummy on syndicate concentration is also economically significant. Ceteris paribus, being externally advised reduces lead lender share by about 9% and increases the number of lenders in the syndicate by about 1.6. This is consistent with the result reported in Sufi (2007) who finds that lending syndicates tend to be more concentrated for borrowers requiring high levels of monitoring. Thus, these results provide support for hypotheses 5 and 6 that syndicate structure also reflects the lower information asymmetry of loan contract terms.

5.3 Endogeneity of External REIT Status

A potential concern is that the decision to choose internal or external organizational status may be endogenous. In this case, the coefficient on the external REIT dummy variable may be biased. There are several ways to account for such a bias. Instrumental variable analysis is one possible approach. However, this does require the instrument to be positively correlated with the REIT status but not with loan contract terms.

Here, we take an alternative approach. In our sample period, an important legislation that was passed by the U.S. Congress was the REIT Modernization Act in 1999. One important aspect of this act was to reduce the mandatory distribution of REITs from

95% to 90%. This had the effect of increasing the cash flow available to REIT management. In fact, a policy paper on this reduction of distribution requirement published on NAREIT's web site states, "This flexibility is especially important in the capital intensive commercial real estate leasing business under which REITs must incur capital costs to maintain the quality of their properties."[12] This suggests that the act further enhanced the ability of internal REITs to engage in high growth or potentially risky strategies. This makes this event a good setting to test for the effect of information asymmetry.

In particular, with the passage of the act, the risk to lenders increases as lenders may be able to pursue more high risk and potentially higher return strategies. While this may very well be beneficial to shareholders, debtholders may rationally demand a higher premium. For internal REITs, given their flexibility of strategies, this is likely to be a large advantage. However, given the greater degree of restrictions faced by external REITs, they will not face similar issues, as they are unable to use these higher payouts for risky new projects. This implies that the degree of difference in loan spreads should increase with the passage of this act.

Using a similar specification as Table 3, we test if this is indeed the case in Table 5. We create a post-REIT Modernization Act dummy variable for years after 2001 and interact it with the external status. In fact, we find that the interaction is negative and significant in the loan spread regression in Table 5 Panel A, suggesting that external REITs derive greater benefits after the passage of this act.

[12] Source: https://www.reit.com/advocacy/policy/federal-tax-legislation/reit-modernization-act-rma-1999

5.4 Corporate Governance, Organizational Status and Loan Contract Terms

It is documented in the literature that effective corporate governance could mitigate agency risk, as shown in Hartzell, Sun and Titman (2006). REITs have other monitoring tools at their disposal that could also mitigate information asymmetry, such as board structure, managerial compensation contracts, and institutional ownership. In this section, we compare loan characteristics of external REITs to those of the well-governed internal REITs. We first sort internal REITs based on the percentage of the board that is independent, and compare external REITs to those internal REITs with a higher percentage of independent board. By comparing the group of external REITs with the group of better governed internal REITs, we can check whether organizational structure is a substitute for other forms of corporate governance mechanism.

We divide the internal REIT sample into four groups based on the rank of independent director percentage. For the internal REITs sample, we then keep only the quartile which has the highest percentage of independent directors and remove the other three quartiles. Next we conduct univariate tests on the loan contract terms between external REITs and better governed internal REITs.

The number and mean value of key loan contract term variables in the univariate test result are reported in Panel A of Table 6. Compared to the better governed internal REITs, external REITs have more favourable loan contract terms, including lower interest rate and less stringent collateral requirements. However, they have more covenants imposed on their loans.

We also conduct multivariate regression analysis to corroborate our univariate result. In our loan contract terms regression, we include additional corporate governance

control variables, including independent director (model 2), and institutional ownership (model 3), in the panels B-E. The regression results generally show that external organizational status is not a perfect substitute for corporate governance mechanism. The estimated coefficients on external organization status are still negative and significant in most models, even after controlling for corporate governance variables.

5.5 Other Robustness checks

In other unreported tests, we also consider dispersion of analyst forecasts in internal and external REITs. We find that external REITs have lower dispersion of forecasts consistent with lower information asymmetry. However, this result does need to be interpreted with caution as we do not have prior relationships between analysts and REITs. Boudry, Kallberg and Liu (2010, 2011) show that these relationships are highly significant in determining analyst behavior and bias in the context of REITs. We also perform similar tests for the bid-ask spreads, and find similar results.

6. Conclusion

The coexistence of the two REIT forms has been a puzzling phenomenon in the real estate literature. In this paper, we seek to provide a partial resolution to the external advisor puzzle from the unique perspective of the information environment and loan contract terms. Using a sample of loan facilities taken by REIT firms from 1987 to 2009, we investigate the effects of REITs organization structure on loan contract terms in the loan market. We compare the price and non-price terms of loan contracts between the two types of borrowers,

controlling for borrower- and loan-specific characteristics, as well as year and loan type fixed effects.

The empirical evidence in this study provides support for the hypothesis that externally advised REITs are offered more favourable loan contract terms by their banks, including lower loan rates, lower collateral requirements, and fewer loan covenants. The loan rate difference between the two groups is 11 basis points in our main regressions. The difference in collateral requirements between the two groups is 33%, and the difference in covenants in 26%, which are both quite significant. We find weak evidence of differences in loan maturities. Our results suggest that banks view external REITs as less informationally opaque and having less pre-contract information uncertainty, which leads to banks offering more favourable contract terms to external REIT borrowers.

An external REIT must weigh the cost and benefit of staying externally advised before it makes the decision to convert to internally advised status. The cost of being externally advised mainly comes from the loss in forgoing higher risk growth projects and staying in a relatively static business model. And the benefit of being externally advised mainly consists of cost savings from external advisory and management (Deloitte, The Canadian REIT Guide, (2008)), as well as more favourable loan contract terms which we find in this study.

References:

Anglin, Paul, Robert Edelstein, Yanmin Gao and Desmond Tsang (2012). What is the Relationship Between REIT Governance and Earnings Management? Forthcoming in *Journal of Real Estate Finance and Economics*.

Ambrose, B., & Linneman, P. (2001). REIT Organizational Structure and Operating Characteristics. *Journal of Real Estate Research, 21*, 146-62.

Baiman, S., & Verrecchia, R.E. (1996). The Relation Among Capital Markets, Financial Disclosure, Production Efficiency, and Insider Trading. *Journal of Accounting Research,* 34, 1–22.

Barclay, M., Marx, L., & Smith, C. (2003). The joint determination of leverage and maturity. *Journal of Corporate Finance, 9*, 149-167.

Basel Committee on Banking Supervision. (2000). Principles for the Management of Credit Risk. *Basel Committee Publications, Bank for International Settlement.*

Bauer, Rob, Piet Eichholtz, Nils Kok. (2010). Corporate Governance and Performance: The REIT Effect. *Journal of Real Estate Finance and Economics*, 38, 1-29.

Berger, A.N., & Udell, G. (1990). Collateral, Loan Quality and Bank Risk. *Journal of Monetary Economics,* 25, 21–42.

Berger, A., Miller, N. H., Petersen, M. A., Rajan, R. G., & Stein, J. (2005). Does Function Follow Organizational Form? Evidence from the Lending Practices of Large and Small banks. *Journal of Financial Economics, 76*, 237-269.

Besanko, D., & Thakor, A. (1987). Collateral and Rationing: Sorting Equilibria in Monopolistic and Competitive Credit Markets. *International Economic Review,* 28, 671-689.

Bester, H. (1985). Screening vs. Rationing in Credit Markets with Imperfect Information. *American Economic Review, 75*, 850–855.

Bharath, S., Dahiya, S., Saunders, A., & Srinivasan, A. (2011). Lending Relationships and Loan Contract Terms. *Review of Financial Studies, 24*, 1141-1203.

Boot, A., Thakor, A., & Udell, G. (1991). Secured Lending and Default Risk: Equilibrium Analysis, Policy Implications and Empirical Results. *The Economics Journal*, *101*, 458-472.

Boot, A., & Thakor, A. (1991). Off-Balance Sheet Liabilities, Deposit Insurance and Capital Regulation. *Journal of Banking and Finance, 15*, 825-846.

Boudry, W., Kallberg, J. & C. Liu. (2010). An analysis of REIT security issuance decisions. *Real Estate Economics* 38, 91-120.

Boudry, W., Kallberg, J. & C. Liu. (2011). Analyst behavior and underwriter choice. *Journal of Real Estate Finance and Economics* 43, 5-38.

Bradley, M., & Roberts, M. R. (2004). The Structure and Pricing of Corporate Debt Covenants. *Working Paper.*

Campbell, R. D., Ghosh, C., & Sirmans, C. F. (2005). Value creation and governance structure in REIT mergers. *Journal of Real Estate Finance and Economics*, 31(2), 225–239.

Capozza, D., & Seguin, P. (1998). Managerial Style and Firm Value. *Real Estate Economics, 26,* 131-50.

Capozza, D., & Seguin, P. (2000). Debt, Agency and Management Contracts in REITs: The External Advisor Puzzle. *Journal of Real Estate Finance and Economics, 20,* 91-116.

Chan, S. H., Erickson, J., & Wang, K. (2003). Real Estate Investment Trusts. *Oxford University Press.*

Degryse, H., & Ongena, S. (2005). Distance, Lending Relationships, and Competition. *Journal of Finance, 60,* 231–266.

Deloitte. (2008). The Canadian REIT Guide. *8th edition, Canada.*

Deng, Y., Devos, E., Rahman, S., & Tsang, D. (2015). The Role of Debt Covenants in the Investment Grade Bond Market – The REIT Experiment. *Journal of Real Estate Finance and Economics* (forthcoming).

Dennis, S., Nandy, D., & Sharpe, I. G. (2000). The determinants of contract terms in bank revolving credit agreements. *Journal of Financial and Quantitative Analysis,* 35, 87-110.

Diamond, D.W., & Verrecchia, R. E. (1991). Disclosure, Liquidity, and the Cost of Capital. *Journal of Finance, 46,* 1325-1359.

Diamond, D.W. (1984). Financial intermediation and delegated monitoring. *Review of Economic Studies,* 51, 393–414.

Diamond, D.W. (1991). Debt maturity structure and liquidity risk. *Quarterly Journal of Econom-ics, 106,* 709-737.

Drucker, S. , & Puri, M. (2005). On the Benefits of Concurrent Lending and Underwriting. *Journal of Finance, 60,* 2763-2799.

Elsas, R., & Krahnen, J. P. (1998). Is relationship lending special? Evidence from credit-file data in Germany. *Journal of Banking & Finance, 22,* 1283-1316.

Engelberg, J., & Sankaraguruswamy, S. (2007). How to Gather Data Using a Web Crawler: An Application Using SAS to Search Edgar. *Working Paper.*

Esty, B. (2001). Structuring loan syndicates: A case study of the Hong Kong Disneyland project loan. *Journal of Applied Corporate Finance,* 14, 80–95.

Fama, E., & French, K. R. (1993). Common Risk Factors in the Returns on Stocks and Bonds. *Journal of Financial Economics, 33,* 3-56.

Flannery, M. J. (1986). Asymmetric information and risky debt maturity choice. *Journal of Finance, 41,* 19-37.

Graham, J. R., Li, S., & Qiu, J. (2008). Corporate Misreporting and Bank Loan Contracting. *Journal of Financial Economics, 89,* 44-61

Guedes, J., & Opler, T. (1996). The determinants of maturity of corporate debt issues. *Journal of Finance,* 51, 1809-1833.

Hartzell, J. C.; L. Sun; & Titman. S. (2006). The Effect of Corporate Governance on Investment: Evidence from Real Estate Investment Trusts. *Real Estate Economics* 34: 343-376.

Holmstrom, B., & Tirole, J. (1997). Financial intermediation, loanable funds, and the real sector. *Quarterly Journal of Economics, 112, 663-691.*

Ivashina, V. (2009). Asymmetric information effects on loan spreads. *Journal of Financial Economics, 92,* 300–319.

Jiménez, G., Salas, V., & Saurina, J. (2006). Determinants of collateral. *Journal of Financial Economics, 81,* 255-281.

Kim, J. B., Tsui, J. S. L., & Yi, C. H. (2011). The voluntary adoption of international financial reporting standards and loan contracting around the world. *Review of Accounting Studies, forthcoming.*

Linneman, P. (1997). Forces Changing the Real Estate Industry Forever. *Wharton Real Estate Reviews, 1997,* 1-12.

Myers, S. C. (1977). Determinants of Corporate Borrowing. *Journal of Financial Economics,* 5(2), pp. 147-175.

Rajan, R., & Winton, A. (1995). Covenants and collateral as incentives to monitor. *Journal of Finance, 50,* 1113-1146.

Ramakrishnan, R. T. S., & Thakor, A. (1984). Information reliability and a theory of financial intermediation. *Review of Economic Studies,* 415-432.

Santos, J. A.C., & Winton, A. (2008). Bank Loans, Bonds, and Informational Monopolies across the Business Cycle, *Journal of Finance*, 63, 1315-1359.

Smith, C. W. Jr., & Warner, J. B. (1979). On Financial Contracting: An Analysis of Bond Covenants. *Journal of Financial Economics*, 117-161.

Stulz, R. M., & Johnson, H. (1985). An Analysis of Secured Debt. *Journal of Financial Economics, 4*, 501-21.

Sufi, A. (2007). Information asymmetry and financing arrangements: Evidence from syndicated loans. *Journal of Finance, 62,* 629–668.

Sun, H. (2010). A Theory on REITs Advisor Choice and the Optimal Compensation Mechanism. *Journal of Real Estate Finance and Economics*, *40,* 387-411.

Appendix: Variable Definitions

AISD is the "All In Spread-Drawn", which is the all-inclusive cost of a drawn loan to the borrower. This equals the coupon spread over LIBOR on the drawn amount plus the annual fee and is reported in basis points.

Collateral is a dummy variable indicating whether the borrower needs to pledge collateral to the lender in the loan contract.

Coverage is defined as log of ratio (1+ EBITDA) divided by Interest Expenses.

Dcov is a dummy variable indicating the existence of covenants.

Default spread is defined as the difference between the yield on Moody's seasoned corporate bond with Baa rating and 10-year U.S. government bond.

External is the dummy variable with 1 indicating whether a REIT is externally advised and 0 otherwise.

Facility Amount is the dollar amount of loan facility in millions.

Indep_director is the percentage of independent directors on the board, defined as the number of independent directors divided by the total number of directors.

Inst_hold is the percentage of institutional investors' holdings, defined as the total number of shares held by institutional investors over the total number of shares outstanding, obtained from *IBES*, calculated for each firm year.

Lead lender share is defined as the percentage of loan kept by the lead lender.

Leverage is defined as the ratio of book value of total debt to book value of assets.

Log(sales) is the logarithm of sales revenue obtained from Compustat fundamental annual data file.

Log(assets) is the logarithm of total book assets as obtained from Compustat fundamental annual data file.

Log(loan amount) is the logarithm of the total amount of the loan facility.

Log(maturity) is the logarithm of maturity of the loan facility in months.

Loan concentration is measured as the fraction of the loan amount to the sum of existing debt plus the loan amount.

Market to book is the ratio of (Book value of assets - Book value of equity + market value of equity) divided by book value of assets.

Maturity is length in months between facility activation date and maturity date.

Ncov is the number of covenant constraints in loan contracts.

Post_Mod is equal to one if year is greater than 2001 and 0 otherwise.

Profitability is defined as EBITDA over sales.

Relationship is the strength of the lending relationship between the REIT firm and the lender bank. It is measured as the ratio of dollar value of deals with the bank to total dollar value of loans borrowed by the firm in the last 5 years before the current loan.

ROA is defined as net income over total assets.

Syndicate size is defined as the total number of lenders in the loan syndicate.

Term Spread is defined as the difference between the yield of the 1-year and 10-year Treasury bonds.

*Total Asset*s is the book value of assets of the borrower in millions as reported in the COMPUSTAT.

Table 1: Distribution of Loans by Year, Relationship and Advisor Status

This table provides the distribution of loans by year and REIT advisor status. The sample period is from year 1987 to year 2009.

Panel A: Number of observations by year and REIT advisor status

Year	Total	Internal	External
1987	3	1	2
1988	5	3	2
1989	1	1	0
1990	12	8	4
1991	5	3	2
1992	2	1	1
1993	20	15	5
1994	77	62	15
1995	88	68	20
1996	134	106	28
1997	221	163	58
1998	327	265	62
1999	134	94	40
2000	286	236	50
2001	126	103	23
2002	165	105	60
2003	160	110	50
2004	257	222	35
2005	345	253	92
2006	367	259	108
2007	243	206	37
2008	93	88	5
2009	31	26	5
Total	**3102**	**2398**	**704**

Panel B: Number of unique loans and REIT firms by year and REIT advisor status

Year	Internal REIT Loans	External REIT Loans	Total Loans	Internal REITs	External REITs	Total REITs
1987	1	2	3	1	1	2
1988	3	2	5	2	2	4
1989	1	0	1	1	0	1
1990	6	3	9	4	3	7
1991	3	1	4	2	1	3
1992	1	1	2	1	1	2
1993	14	5	19	10	5	15
1994	48	11	59	37	8	45
1995	49	13	62	35	10	45
1996	71	20	91	45	14	59
1997	77	28	105	55	16	71
1998	77	20	97	53	15	68
1999	38	19	57	33	13	46
2000	77	21	98	52	15	67
2001	42	8	50	31	8	39
2002	37	19	56	26	16	42
2003	35	9	44	26	6	32
2004	60	12	72	42	9	51
2005	79	14	93	53	10	63
2006	58	17	75	41	11	52
2007	51	5	56	36	4	40
2008	42	1	43	35	1	36
2009	6	1	7	5	1	6
Total	**876**	**232**	**1108**	**626**	**170**	**796**

Table 2: Summary Statistics and Univariate Tests for Key Loan and Borrower Characteristics

Table 2 presents summary statistics of loan characteristics and borrower characteristics measures. Panel A reports the summary statistics on key loan and borrower characteristics variables for the overall sample. Internal REITs sample summary statistics are reported in Panel B and external ones are in Panel C. The univariate test of key loan characteristics and borrower characteristics between internal and external REIT types are reported in Panel D. See Appendix for definitions of all variables used in this table. All values are winsorized at the 1% and 99% level.

Panel A: Overall Sample

Variable	N	Mean	Std Dev	Min	25%	Median	75%	Max
Key Loan Characteristics								
AISD	2890	172.660	105.700	45.000	90.000	140.000	225.000	388.000
Facility Amount ($ Mil)	3100	361.140	376.780	10.000	113.830	250.000	473.000	2000.000
Maturity (Months)	2051	34.720	14.260	5.000	29.000	36.000	36.000	95.000
Collateral	3102	0.200	0.400	0.000	0.000	0.000	0.000	1.000
Ncov	3102	4.889	4.392	0.000	0.000	6.000	9.000	14.000
Dcov	3109	0.603	0.489	0.000	0.000	1.000	1.000	1.000
Lead Lender Share	3098	0.357	0.318	0.045	0 .125	0.25	0.5	1.000
Number of Lenders	3098	10.483	8.310	1	4	9	15	35
Key Borrower Characteristics								
Total Assets ($ Mil)	2648	3002.200	3509.790	19.150	831.100	1750.810	3941.150	18794.250
Coverage	331	1.280	0.520	0.360	1.090	1.190	1.370	4.190
Leverage	2613	0.500	0.140	0.040	0.420	0.490	0.570	0.860
Profitability	335	0.480	0.180	0.160	0.390	0.450	0.630	0.930
Market to Book	2608	1.300	0.270	0.820	1.110	1.260	1.460	2.240

Panel B: Internal REITs Sample

Variable	N	Mean	Std Dev	Min	25%	Median	75%	Max
Key Loan Characteristics								
AISD	2212	174.300	103.320	45.000	100.000	150.000	225.000	388.000
Facility Amount ($ Mil)	2398	352.310	370.060	10.000	110.000	235.000	450.000	2000.000
Maturity (Months)	1569	34.490	14.060	5.000	29.000	36.000	36.000	95.000
Collateral	2398	0.220	0.410	0.000	0.000	0.000	0.000	1.000
Ncov	2398	4.714	4.508	0.000	0.000	6.000	9.000	14.000
Dcov	2398	0.571	0.495	0.000	0.000	1.000	1.000	1.000
Lead Lender Share	2396	0.366	0.320	0.038	0.125	0.250	0.500	1.000
Number of Lenders	2395	10.159	8.120	1.000	3.000	8.000	15.000	35.000
Key Borrower Characteristics								
Total Assets ($ Mil)	1987	3365.700	3898.880	19.150	853.060	2011.910	4425.780	18794.250
Coverage	187	1.255	0.583	0.360	1.035	1.200	1.348	4.186
Leverage	1959	0.510	0.140	0.040	0.430	0.490	0.570	0.860
Profitability	190	0.498	0.198	0.163	0.387	0.453	0.663	0.935
Market to Book	1957	1.290	0.270	0.860	1.110	1.250	1.430	2.240

Panel C: External REITs Sample

Variable	N	Mean	Std Dev	Min	25%	Median	75%	Max
Key Loan Characteristics								
AISD	678	167.300	113.000	45.000	85.000	120.000	200.000	388.000
Facility Amount ($ Mil)	702	391.330	397.680	10.000	125.000	300.000	500.000	2000.000
Maturity (Months)	482	35.470	14.900	5.000	28.000	36.000	39.000	95.000
Collateral	704	0.150	0.360	0.000	0.000	0.000	0.000	1.000
Ncov	704	5.483	3.917	0.000	0.000	7.000	8.000	13.000
Dcov	704	0.709	0.455	0.000	0.000	1.000	1.000	1.000
Lead Lender Share	702	0.329	0.308	0.055	0.111	0.200	0.500	1.000
Number of Lenders	703	11.586	8.842	1.000	5.000	9.000	16.000	31.000
Key Borrower Characteristics								
Total Assets ($ Mil)	661	1901.500	1438.570	76.330	57.650	1607.960	2688.610	5679.310
Coverage	144	1.321	0.419	0.568	1.156	1.189	1.405	2.713
Leverage	654	0.470	0.140	0.040	0.380	0.480	0.560	0.860
Profitability	145	0.457	0.156	0.163	0.200	0.430	0.559	0.915
Market to Book	651	1.320	0.290	0.760	1.090	1.330	1.550	2.240

Panel D: Univariate tests of loan and borrower characteristics between Internal and external REITS

	N	Internal			External			Diff	t- stat	Z- stat
		N	Mean	Median	N	Mean	Median			
Key Loan Characteristics										
Facility Amount ($mil)	3100	2398	352.307	235.000	702	391.329	300.000	-39.022	-2.322**	-2.787***
AISD	2890	2212	174.305	150.000	678	167.301	120.000	7.004	1.440*	3.986***
Maturity (month)	2051	1569	34.491	36.000	482	35.467	36.000	-0.976	-1.275	-2.177**
Collateral	3102	2398	0.216	0.000	704	0.151	0.000	0.066	4.143***	3.830***
Ncov	3102	2398	4.714	6.000	704	5.483	7.000	-0.769	-4.418***	-3.217***
Dcov	3102	2398	0.571	1.000	2398	0.709	1.000	-0.137	-6.912***	-6.553***
Lead Lender Share	3098	2396	0.366	0.250	702	0.329	0.200	0.036	2.740***	3.137***
Number of Lenders	3098	2395	10.160	8.000	703	11.586	9.000	-1.427	-3.830***	-3.828***
Key Borrower Characteristics										
Total Assets	2648	1987	3365.702	2011.912	661	1909.504	1607.964	1456.198	14.025***	5.994***
Leverage	2613	1959	0.507	0.491	654	0.470	0.483	0.037	5.808***	4.111***
Market to Book	2608	1957	1.294	1.250	651	1.319	1.325	-0.024	-1.886**	-2.607***

Table 3: REIT Advisor Status and Loan Contract Terms

This table tests the effect of being externally advised on loan contract terms, including loan spread, pledge of collateral, number of covenants, and loan maturity. In panel A, the dependent variable is *AISD,* or "All In Spread-Drawn", which is the all-inclusive cost of a drawn loan to the borrower. In panel B, the dependent variable *collateral* is a dummy variable indicating the presence of collateral in loan contract. In panel C, the dependent variable *Ncov* is the number of covenant constraints in loan contracts. In panel D, the dependent variable *Log(maturity)* is the logarithm of maturity of the loan facility in months. *External* is a dummy variable with 1 indicating whether a REIT is externally advised and 0 otherwise. See Appendix for definitions of all variables used in this table. Numbers in the parentheses are standard errors corrected for heteroscedasticity. (*** Significant at one percent level, ** Significant at five percent level,*Significant at ten percent level)

Panel A: External Status and Loan Spread (OLS)

VARIABLES	(1) AISD	(2) AISD	(3) AISD	(4) AISD	(5) AISD
External	-15.85***	-16.19***	-16.10***	-14.67**	-16.21**
	(5.653)	(6.024)	(6.033)	(6.029)	(6.767)
Log(maturity)	1.39	3.41	4.06	4.36	1.07
	(5.133)	(5.229)	(5.534)	(5.577)	(5.953)
Log(loan size)	-15.20***	-12.66***	-12.80***	-12.82***	-9.33**
	(2.848)	(3.058)	(3.261)	(3.250)	(4.547)
Log(assets)	-14.29***	-16.15***	-16.01***	-15.90***	-18.50***
	(1.664)	(2.047)	(2.128)	(2.174)	(4.263)
Leverage	84.74***	105.60***	104.47***	103.70***	95.68***
	(15.487)	(16.832)	(17.793)	(17.868)	(23.701)
Collateral	39.42***	34.09***	33.96***	33.22***	36.48***
	(5.755)	(6.021)	(5.983)	(6.033)	(7.325)
Market to book	-53.54***	-56.11***	-55.56***	-54.78***	-59.75***
	(8.679)	(10.143)	(10.464)	(10.607)	(11.455)
Term Spread	4.80*	-65.58	-30.55***	-31.20***	-19.12**
	(2.685)	(81.868)	(5.371)	(6.027)	(7.872)
Default Spread	11.43*	40.02	-25.49**	-25.29**	103.20***
	(6.056)	(152.670)	(10.134)	(10.454)	(24.898)
Relationship					-32.54***
					(8.584)
Lender_mktshare					10.30
					(71.457)
Constant	547.78***	602.87**	724.23***	720.93***	271.36***
	(51.439)	(273.272)	(61.236)	(62.120)	(92.324)
Year FE	No	Yes	Yes	Yes	Yes
Loan Type	No	No	Yes	Yes	Yes
Lender FE	No	No	No	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes	Yes
Observations	1,697	1,697	1,697	1,697	1,404
R-squared	0.19	0.22	0.22	0.22	0.22
Adj. R-squared	0.18	0.20	0.20	0.20	0.19

Panel B: External Status and Collateral Requirement (Probit)

VARIABLES	(1) collateral	(2) collateral	(3) collateral	(4) collateral	(5) collateral
External	-0.27***	-0.34***	-0.33***	-0.33***	-0.39***
	(0.082)	(0.089)	(0.089)	(0.089)	(0.101)
Log(maturity)	0.06	-0.00	0.01	0.01	-0.14
	(0.074)	(0.077)	(0.079)	(0.079)	(0.093)
Log(loan size)	-0.45***	-0.32***	-0.31***	-0.29***	-0.40***
	(0.070)	(0.076)	(0.079)	(0.080)	(0.117)
Loan Concentration	0.16	0.32	0.26	0.17	3.50***
	(0.446)	(0.479)	(0.483)	(0.487)	(0.784)
Log(assets)	-0.07	-0.16*	-0.17*	-0.18**	-0.09
	(0.081)	(0.088)	(0.089)	(0.089)	(0.132)
Leverage	0.01	0.93**	0.84**	0.76**	4.11***
	(0.324)	(0.365)	(0.378)	(0.381)	(0.567)
Market to book	-0.38**	-0.70***	-0.69***	-0.71***	-0.62***
	(0.158)	(0.198)	(0.199)	(0.199)	(0.220)
Relationship					-0.22*
					(0.134)
Lender_mktshare					-0.56
					(1.116)
Constant	8.49***	11.54***	11.50***	11.43***	6.31***
	(0.773)	(0.848)	(0.875)	(0.890)	(1.349)
Year FE	No	Yes	Yes	Yes	Yes
Loan Type	No	No	Yes	Yes	Yes
Lender FE	No	No	No	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes	Yes
Observations	1,768	1,762	1,762	1,762	1,446
Adj. R-squared	0.13	0.20	0.20	0.21	0.27

Panel C: External Status and Number of Covenants (Ologit)

VARIABLES	(1) ncov	(2) ncov	(3) ncov	(4) ncov	(5) ncov
External	-0.20**	-0.21**	-0.24**	-0.25**	-0.23**
	(0.093)	(0.100)	(0.102)	(0.102)	(0.111)
Log(maturity)	0.03	0.13	0.02	0.03	0.01
	(0.101)	(0.099)	(0.102)	(0.103)	(0.115)
Log(loan size)	0.93***	0.75***	0.73***	0.73***	0.45***
	(0.121)	(0.128)	(0.146)	(0.147)	(0.154)
Loan Concentration	-0.49	0.08	0.36	0.43	0.98
	(0.734)	(0.797)	(0.874)	(0.882)	(0.951)
Log(assets)	-0.74***	-0.62***	-0.60***	-0.60***	-0.32**
	(0.136)	(0.146)	(0.159)	(0.159)	(0.160)
Leverage	-0.22	-0.15	0.20	0.21	-0.44
	(0.487)	(0.549)	(0.615)	(0.624)	(0.724)
Market to book	0.14	0.23	0.13	0.12	0.08
	(0.149)	(0.194)	(0.199)	(0.206)	(0.224)
Relationship					0.22
					(0.160)
Lender_mktshare					1.01
					(1.279)
Constant	18.03***	16.11***	16.49***	16.63***	14.63***
	(1.345)	(1.345)	(1.497)	(1.512)	(2.125)
Year FE	No	Yes	Yes	Yes	Yes
Loan Type	No	No	Yes	Yes	Yes
Lender FE	No	No	No	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes	Yes
Observations	1,768	1,768	1,768	1,768	1,452
Adj. R-squared	0.06	0.09	0.09	0.09	0.05

Panel D: External Status and Loan Maturity (OLS)

VARIABLES	(1) Log(maturity)	(2) Log(maturity)	(3) Log(maturity)	(4) Log(maturity)	(5) Log(maturity)
External	0.05*	0.06**	0.03	0.03	0.04
	(0.029)	(0.029)	(0.028)	(0.028)	(0.030)
Log(loan size)	0.10***	0.10***	0.12***	0.12***	0.20***
	(0.018)	(0.020)	(0.020)	(0.020)	(0.026)
Log(assets)	-0.11***	-0.16***	-0.15***	-0.16***	-0.28***
	(0.040)	(0.044)	(0.043)	(0.043)	(0.060)
Leverage	0.06	0.06	0.13	0.13	0.02
	(0.090)	(0.096)	(0.095)	(0.095)	(0.112)
Collateral	0.05	0.01	0.02	0.01	-0.05
	(0.033)	(0.033)	(0.031)	(0.031)	(0.035)
Market to book	0.20***	0.04	-0.03	-0.03	-0.01
	(0.048)	(0.066)	(0.063)	(0.063)	(0.067)
Log(Sales)	0.13***	0.16***	0.15***	0.15***	0.20***
	(0.040)	(0.045)	(0.044)	(0.044)	(0.057)
Relationship					-0.20***
					(0.043)
Lender_mktshare					0.43
					(0.326)
Constant	1.54***	2.47***	1.56***	1.57***	-1.42***
	(0.339)	(0.359)	(0.371)	(0.371)	(0.422)
Year FE	No	Yes	Yes	Yes	Yes
Loan Type	No	No	Yes	Yes	Yes
Lender FE	No	No	No	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes	Yes
R-squared	0.06	0.11	0.18	0.19	0.21
Adj. R-squared	0.06	0.09	0.17	0.17	0.18

Table 4: REIT Advisor Status and Loan Syndicate Structure

This table tests the effect of being externally advised on loan syndicate structure, in terms of lead lender shares and syndicate size, by estimating the following equation:

$$Syndicate\ Structure_i = X_i\beta + External_i\gamma + Year\ + Loan\ Purpose$$

The dependent variable in model 1 is *Lead lender share*, defined as the percentage of loan kept by the lead lender. The dependent variable in model 2 is *syndicate size*, defined as the total number of lenders in the loan syndicate. Key independent variable in the model is *External*, which is a dummy variable with 1 indicating whether a REIT is externally advised and 0 otherwise. The control variables (*X*) include firm characteristics and loan characteristics variables. See Appendix for detailed definitions of all variables used in this table. Numbers in the parentheses are standard errors corrected for heteroscedasticity. (*** Significant at one percent level, ** Significant at five percent level ,*Significant at ten percent level)

	(1)	(2)
VARIABLES	Lead lender share	Syndicate Size
External	-0.09**	1.58**
	(0.043)	(0.617)
Log(loan amount)	-0.17***	2.52***
	(0.025)	(0.372)
Log(loan amount)*mid	-0.00	0.10**
	(0.003)	(0.041)
Log(loan amount)*large	-0.00	0.59***
	(0.004)	(0.058)
Log(maturity)	-0.03	1.65***
	(0.035)	(0.458)
Log(firm sales)	-0.12	-0.70
	(0.087)	(1.022)
Rated	-0.04	-2.16***
	(0.045)	(0.679)
Term Loan	-0.05	0.75
	(0.060)	(0.839)
Constant	4.42***	-47.46***
	(0.406)	(5.860)
Year FE	Yes	Yes
Loan Purpose FE	Yes	Yes
Observations	230	230
R-squared	0.73	0.86
Adj. R-squared	0.70	0.85

Table 5: REIT Advisor Status and Loan Contract Terms
(Diff-in-Diff Analysis around REIT Modernization Act)

This table shows the diff-in-diff analysis result around the REIT Modernization Act in year 2001. Post_mod dummy is equal to one if year is greater than 2001 and 0 otherwise. See Appendix for definitions of all variables used in this table. Numbers in the parentheses are standard errors corrected for heteroscedasticity. (*** Significant at one percent level, ** Significant at five percent level,*Significant at ten percent level)

Panel A: External Status and Loan Spread (OLS)

	(1)	(2)	(3)	(4)
VARIABLES	AISD	AISD	AISD	AISD
External	-18.00***	-17.95***	26.89**	23.67**
	(6.246)	(6.260)	(11.671)	(11.474)
Post_mod		-2.76	13.20	
		(7.977)	(8.340)	
External*Post_mod			-69.97***	-64.61***
			(13.095)	(12.626)
Log(maturity)	-0.05	0.03	-1.51	-1.08
	(5.911)	(5.963)	(5.899)	(5.904)
Log(loan size)	-10.63**	-10.55**	-8.96**	-8.73*
	(4.434)	(4.442)	(4.443)	(4.466)
Log(assets)	-21.27***	-21.00***	-20.48***	-19.34***
	(3.928)	(4.029)	(4.066)	(3.974)
Leverage	74.91***	76.33***	84.43***	89.97***
	(22.308)	(22.250)	(22.062)	(22.258)
Collateral	39.64***	39.42***	40.28***	39.27***
	(7.200)	(7.131)	(7.150)	(7.198)
Market to book	-62.48***	-61.12***	-57.71***	-52.04***
	(9.210)	(10.214)	(10.024)	(8.986)
Term spread	6.90**	6.86**	7.34**	7.11**
	(3.037)	(3.048)	(3.051)	(3.027)
Default spread	10.90	12.58	14.82*	21.94***
	(6.633)	(8.232)	(8.102)	(6.438)
Relationship	-25.14***	-25.27***	-27.92***	-28.29***
	(7.410)	(7.425)	(7.321)	(7.326)
Lender_mktshare	100.92*	96.82	100.97*	82.83
	(58.175)	(61.167)	(60.632)	(58.508)
Constant	546.25***	539.28***	489.89***	463.38***
	(67.315)	(70.425)	(71.731)	(70.060)
Loan Type FE	Yes	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes
Observations	1,404	1,404	1,404	1,404
R-squared	0.19	0.19	0.21	0.21
Adj. R-squared	0.17	0.17	0.19	0.19

Panel B: External Status and Collateral Requirement (Probit)

VARIABLES	(1) collateral	(2) collateral	(3) collateral	(4) collateral
External	-0.39***	-0.39***	-0.58***	-0.58***
	(0.101)	(0.101)	(0.155)	(0.155)
Post_mod		-0.95***	-0.99***	
		(0.360)	(0.360)	
External*Post_mod			0.35*	0.35*
			(0.195)	(0.195)
Log(maturity)	-0.14	-0.14	-0.13	-0.13
	(0.093)	(0.093)	(0.093)	(0.093)
Log(loan size)	-0.40***	-0.40***	-0.42***	-0.42***
	(0.117)	(0.117)	(0.117)	(0.117)
Loan_debt	3.50***	3.50***	3.66***	3.66***
	(0.784)	(0.784)	(0.790)	(0.790)
Log(assets)	-0.09	-0.09	-0.08	-0.08
	(0.132)	(0.132)	(0.132)	(0.132)
Leverage	4.11***	4.11***	4.18***	4.18***
	(0.567)	(0.567)	(0.567)	(0.567)
Market to book	-0.62***	-0.62***	-0.64***	-0.64***
	(0.220)	(0.220)	(0.221)	(0.221)
Relationship	-0.22*	-0.22*	-0.20	-0.20
	(0.134)	(0.134)	(0.134)	(0.134)
Lender_mktshare	-0.56	-0.56	-0.49	-0.49
	(1.116)	(1.116)	(1.115)	(1.115)
Constant	6.31***	7.26***	7.63***	6.64***
	(1.349)	(1.244)	(1.253)	(1.355)
Loan Type FE	Yes	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes
Observations	1,446	1,446	1,446	1,446
Adj. R-squared	0.27	0.27	0.27	0.27

Panel C: External Status and Number of Covenants (Ologit)

VARIABLES	(1) ncov	(2) ncov	(3) ncov	(4) ncov
External	-0.23**	-0.23**	-0.22	-0.22
	(0.111)	(0.111)	(0.181)	(0.181)
Post_mod		-1.03**	-1.03**	
		(0.428)	(0.435)	
External*Post_mod			-0.01	-0.01
			(0.219)	(0.219)
Log(maturity)	0.01	0.01	0.00	0.00
	(0.115)	(0.115)	(0.115)	(0.115)
Log(loan size)	0.45***	0.45***	0.45***	0.45***
	(0.154)	(0.154)	(0.155)	(0.155)
Loan_debt	0.98	0.98	0.97	0.97
	(0.951)	(0.951)	(0.959)	(0.959)
Log(assets)	-0.32**	-0.32**	-0.32**	-0.32**
	(0.160)	(0.160)	(0.161)	(0.161)
Leverage	-0.44	-0.44	-0.44	-0.44
	(0.724)	(0.724)	(0.727)	(0.727)
Market to book	0.08	0.08	0.08	0.08
	(0.224)	(0.224)	(0.225)	(0.225)
Relationship	0.22	0.22	0.22	0.22
	(0.160)	(0.160)	(0.161)	(0.161)
Lender_mktshare	1.01	1.01	1.01	1.01
	(1.279)	(1.279)	(1.280)	(1.280)
Constant	14.63***	13.59***	13.60***	14.63***
	(2.125)	(1.965)	(1.975)	(2.126)
Loan Type FE	Yes	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes
Observations	1,452	1,452	1,452	1,452
Adj. R-squared	0.05	0.05	0.05	0.05

Panel D: External Status and Loan Maturity (OLS)

VARIABLES	(1) Log(maturity)	(2) Log(maturity)	(3) Log(maturity)	(4) Log(maturity)
External	0.04	0.04	0.08*	0.08*
	(0.030)	(0.030)	(0.048)	(0.048)
Post_Mod		1.71***	1.75***	
		(0.098)	(0.106)	
External*Post_Mod			-0.06	-0.06
			(0.060)	(0.060)
Log(loan size)	0.20***	0.20***	0.20***	0.20***
	(0.026)	(0.026)	(0.026)	(0.026)
Log(assets)	-0.28***	-0.28***	-0.28***	-0.28***
	(0.060)	(0.060)	(0.060)	(0.060)
Leverage	0.02	0.02	0.02	0.02
	(0.112)	(0.112)	(0.112)	(0.112)
Collateral	-0.05	-0.05	-0.05	-0.05
	(0.035)	(0.035)	(0.035)	(0.035)
Market to book	-0.01	-0.01	-0.01	-0.01
	(0.067)	(0.067)	(0.067)	(0.067)
Log(Sales)	0.20***	0.20***	0.20***	0.20***
	(0.057)	(0.057)	(0.057)	(0.057)
Relationship	-0.20***	-0.20***	-0.20***	-0.20***
	(0.043)	(0.043)	(0.043)	(0.043)
Lender_mktshare	0.43	0.43	0.43	0.43
	(0.326)	(0.326)	(0.326)	(0.326)
Constant	-1.42***	-1.42***	-1.49***	-1.49***
	(0.422)	(0.422)	(0.437)	(0.437)
Loan Type FE	Yes	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes	Yes
Rating FE	Yes	Yes	Yes	Yes
Observations	1,451	1,451	1,451	1,451
R-squared	0.21	0.21	0.21	0.21
Adj. R-squared	0.18	0.18	0.18	0.18

Table 6: Corporate Governance, REIT Advisor Status and Loan Contract Terms

This table tests the effect of being externally advised on loan contract terms, including loan spread, pledge of collateral, number of covenants, and loan maturity, adding control variables for corporate governance, including percentage of independent directors and institutional holdings. Better governed internal REIT sample is the top quartile of internal REITs sorted on the percentage of independent directors. Panel A reports the univariate test result. And Panel B, C, D and E report the multivariate regression result. In Panel B, the dependent variable is *AISD*, or "All In Spread-Drawn", which is the all-inclusive cost of a drawn loan to the borrower. In panel B, the dependent variable *collateral* is a dummy variable indicating the presence of collateral in loan contract. In panel C, the dependent variable *Ncov* is the number of covenant constraints in loan contracts. In panel D, the dependent variable *Log(maturity)* is the logarithm of maturity of the loan facility in months. *External* is a dummy variable with 1 indicating whether a REIT is externally advised and 0 otherwise. *Indep_director* is the percentage of independent directors on the board, defined as the number of independent directors divided by the total number of directors. *Inst_hold* is the percentage of institutional investors' holdings, defined as the total number of shares held by institutional investors over the total number of shares outstanding. See Appendix for definitions of all variables used in this table. We use *loan type fixed effects* to control for the three major loan types, i.e., Term loan, Revolver/Line < 1 Yr, and 'Revolver/Line >= 1 Yr'. Numbers in the parentheses are standard errors corrected for heteroscedasticity. (*** Significant at one percent level, ** Significant at five percent level,*Significant at ten percent level)

Panel A: Univariate Statistics of Loan Contract Terms for Better Governed Internal Reits and External REITs

	Internal		External			
	N	**Mean**	**N**	**Mean**	**Diff**	**t- stat**
Loan spread	788	170.801	215	156.688	14.112	1.5145*
Collateral	821	0.194	217	.060	0.134	6.2972***
Ncov	821	3.996	217	5.392	-1.395	-5.260***
Log(maturity)	390	36.536	93	35.194	1.342	0.908

Panel B: Corporate Governance and Organizational Status on Loan Spread

VARIABLES	(1) AISD	(2) AISD	(3) AISD
External	-16.52***	-27.44*	-11.37*
	(5.854)	(14.527)	(6.152)
Indep_director		4.37	
		(3.961)	
Inst_hold			10.18***
			(2.830)
Log(maturity)	3.54	-28.51**	6.31
	(5.324)	(11.627)	(5.459)
Log(loan_size)	-13.26***	-48.05***	-15.76***
	(3.220)	(8.474)	(4.032)
Log(assets)	-16.00***	12.44*	-20.21***
	(2.100)	(7.011)	(3.694)
Leverage	109.27***	152.22***	110.40***
	(17.252)	(33.237)	(18.868)
Collateral	35.62***	47.11***	31.65***
	(5.972)	(10.511)	(6.323)
Market to book	-62.75***	-41.42***	-71.72***
	(9.829)	(15.465)	(9.979)
Ncov	0.09	0.20	0.15
	(0.707)	(1.366)	(0.723)
Term Spread	1.98	-9.27	1.93
	(5.829)	(8.038)	(5.891)
Default Spread	19.72	37.51*	21.43*
	(12.505)	(20.726)	(12.592)
Constant	492.23***	993.78***	541.42***
	(65.380)	(137.413)	(70.197)
Year FE	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes
Credit Rating FE	Yes	Yes	Yes
Loan Type FE	Yes	Yes	Yes
Observations	1,697	471	1,586
R-squared	0.21	0.41	0.20
Adj. R-squared	0.20	0.39	0.18

Panel C: Corporate Governance and Organizational Status on Collateral

VARIABLES	(1) collateral	(2) collateral	(3) collateral
External	-0.22***	-0.86***	-0.36***
	(0.081)	(0.227)	(0.091)
Indep_director		1.61**	
		(0.670)	
Inst_hold			0.10***
			(0.021)
Log(maturity)	0.07	-0.43**	-0.00
	(0.075)	(0.178)	(0.080)
Log(loan amount)	-0.56***	-0.37*	-0.60***
	(0.073)	(0.219)	(0.076)
Loan concentration	0.26	-0.38	2.38***
	(0.440)	(1.904)	(0.522)
Log(assets)	0.01	-0.45	-0.22**
	(0.080)	(0.273)	(0.086)
Leverage	0.13	6.03***	3.13***
	(0.319)	(1.013)	(0.468)
Market to book	-0.68***	-0.85***	-1.13***
	(0.180)	(0.308)	(0.174)
Constant	10.20***	5.89**	10.55***
	(0.830)	(2.328)	(0.890)
Year FE	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes
Credit Rating FE	Yes	Yes	Yes
Loan Type FE	Yes	Yes	Yes
Observations	1,768	479	1,656
Pseudo. R-squared	0.14	0.37	0.24

Panel D: Corporate Governance and Organizational Status on Loan Covenants

VARIABLES	(1) ncov	(2) ncov	(3) ncov
External	-0.09	0.29	0.03
	(0.096)	(0.249)	(0.103)
Indep_director		-0.10	
		(0.086)	
Inst_hold			-0.10*
			(0.053)
Log(maturity)	0.09	1.08**	0.08
	(0.108)	(0.476)	(0.107)
Log(loan amount)	0.82***	0.96***	0.51***
	(0.064)	(0.209)	(0.081)
Collateral	0.71***	2.31***	0.99***
	(0.133)	(0.313)	(0.135)
Log(assets)	-0.57***	-0.56***	-0.14*
	(0.053)	(0.203)	(0.084)
Leverage	-0.03	0.06	-0.82**
	(0.355)	(0.864)	(0.381)
Market to book	0.22	0.01	0.39**
	(0.175)	(0.353)	(0.175)
Constant	13.96***	24.24***	11.42***
	(1.249)	(3.704)	(1.383)
Year FE	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes
Credit Rating FE	Yes	Yes	Yes
Loan Type FE	Yes	Yes	Yes
Observations	1,768	479	1,656
Adj. R-squared	0.09	0.13	0.06

Panel E: Corporate Governance and Organizational Status on Loan Maturity

VARIABLES	(1) Log(maturity)	(2) Log(maturity)	(3) Log(maturity)
External	0.04	-0.06	0.03
	(0.029)	(0.054)	(0.032)
Indep_director		-0.01	
		(0.015)	
Inst_hold			-0.01
			(0.013)
Log(loan amount)	0.06***	0.07*	0.09***
	(0.020)	(0.038)	(0.025)
Log(assets)	-0.13***	-0.18**	-0.18***
	(0.043)	(0.080)	(0.049)
Leverage	0.28***	0.51***	0.37***
	(0.095)	(0.151)	(0.103)
Collateral	0.01	-0.06	0.00
	(0.032)	(0.054)	(0.033)
Market to book	0.09	0.40***	0.07
	(0.057)	(0.068)	(0.058)
Log(sales)	0.14***	0.16**	0.16***
	(0.044)	(0.069)	(0.045)
Constant	2.19***	1.98***	1.86***
	(0.365)	(0.544)	(0.396)
Year FE	Yes	Yes	Yes
Lender FE	Yes	Yes	Yes
Credit Rating FE	Yes	Yes	Yes
Loan Type FE	Yes	Yes	Yes
Observations	1,766	479	1,654
R-squared	0.13	0.17	0.13
Adj. R-squared	0.12	0.15	0.12