Real Estate Holdings of Public Firms and Collateral Discount*

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November 2, 2016

Abstract

Using a novel and detailed transaction-level data on commercial real estate assets, we construct real estate asset portfolios for a comprehensive set of public firms between 2000 and 2013. We find that a commercial real estate asset is sold at a significant discount when the real estate asset is not redeployable for alternative uses, when potential buyers in the geographical region are limited, and when the industry is concentrated. These effects are further exacerbated for distressed firms and cannot be fully reconciled by the quality of real estate assets. Bank loan spreads incorporate information on the expected commercial real estate discounts due to collateral channel. We identify plausible exogenous shocks to commercial real estate prices by using significant surges of foreign investor demand from countries with increased policy uncertainty. We find that, after a region experiences large foreign investor demand from these countries, the impact of collateral discount on loan spreads lessens.

JEL Classification: G32, G33, R33

Keywords: Bank Loan, Collateral discount, Real estate transactions, Foreign demand

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*We thank Brent Ambrose, Sreedhar Bharath, Geoffrey Booth, Lauren Cohen, Michelle Lowry, Chris Malloy, Chris Parsons, Amit Seru, Doğan Tırtıroğlu, and seminar participants at Özyegin University, University of Mannheim, University of Cambridge, University of Texas at Dallas, Frankfurt School of Finance and Management, the annual meeting of the German Finance Association, and the annual conference of the Multinational Finance Society for their comments. We are grateful to Real Estate Research Institute (RERI) for financial support and Real Capital Analytics (RCA) for providing us with the commercial real estate transactions data.

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Abstract

Using a novel and detailed transaction-level data on commercial real estate assets, we construct real estate asset portfolios for a comprehensive set of public firms between 2000 and 2013. We find that a commercial real estate asset is sold at a significant discount when the real estate asset is not redeployable for alternative uses, when potential buyers in the geographical region are limited, and when the industry is concentrated. These effects are further exacerbated for distressed firms and cannot be fully reconciled by the quality of real estate assets. Bank loan spreads incorporate information on the expected commercial real estate discounts due to collateral channel. We identify plausible exogenous shocks to commercial real estate prices by using significant surges of foreign investor demand from countries with increased policy uncertainty. We find that, after a region experiences large foreign investor demand from these countries, the impact of collateral discount on loan spreads lessens.

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1 Introduction

Public firms invest significant amounts in real estate assets, although they may not operate primarily in the real estate business. While empty offices, warehouses, and idle land offer growth opportunities when companies expand, they often become a burden when companies become distressed. This happens partially because real estate assets are frequently used as collateral to borrow from banks. If the borrower falls short on liquidity and defaults on its debt, the liquidation value of idle properties and the factors that could potentially affect it becomes a concern for the lender.

Although the literature has shown that real estate assets, on average, cannot be traded quickly without compromising significant value, less is known about whether loan contracts incorporate information on a borrower's real estate portfolio characteristics. Our main contribution in this paper is to document the micro-level factors that affect the liquidation value of commercial real estate, and to test whether information in borrowers' real estate portfolio holdings is priced in debt markets. Specifically, we study whether banks lend at higher rates due to anticipated losses in the liquidation value if the borrower's asset is not redeployable for alternative uses, potential buyers in the geographical region are limited or the industry is concentrated such that only a few firms are able to pay for the best-use price. Once we establish these factors, we estimate the potential loss in the value of a firm's real estate portfolio in case of a hypothetical distress scenario and then investigate whether firms with a higher collateral discount borrow at higher rates. We use real estate asset demand of foreign investors who face high investment uncertainty in their home country as a plausible exogenous shock to commercial real estate prices to study how changes in collateral values affect bank loan rates.

In our context, the main mechanism linking real estate prices to debt markets is collateral. Collateral is an important part of debt contracts.[1] For instance, Cvijanovic (2014) illustrates that a one-standard-deviation increase in predicted value of a firm's pledgeable collateral translates into a 3-percent increase in leverage ratio. Banks often require borrowers to pledge some of their assets, primarily real estate assets, as collateral to secure payments. Collateral increases a lender's incentive to monitor (Rajan and Winton, 1995), and it helps to mitigate moral hazard in loan contracting (Boot, Thakor, and Udell, 1991).[2] Analyzing micro-level-value determinants of a major asset class that is often used as collateral is a first-order issue because when firms are financially constrained, a positive shock to the value of their collateral makes it easier to borrow, and therefore to invest (Bernanke and Gertler, 1986; Kiyotaki and Moore, 1997).

A positive relation between loan rates and the existence of collateral can arise if banks require collateral from high-default-risk borrowers. This moral hazard-induced selection effect was documented in several papers, including Berger and Udell (1990), John, Lynch, and Puri (2003), and Knox (2005). Hertzel and Officer (2012) note that "...Spreads are also significantly higher for loans containing covenants or pledged assets that protect lenders' interests. This, seemingly counterintuitive, result has been a facet of almost all empirical analyses using Dealscan data and is probably the result of these variables picking up some component of credit risk that is missing from the other control variables." Benmelech and Bergman (2009, 2011) caution that research designs using extensive margins to study existence (or value) of collateral and loan rates suffer from endogeneity and selection bias. They suggest that looking at the intensive, rather than the extensive, margin of collateral would circumvent these issues.

[1] According to the Federal Reserve's Surveys of Terms of Business Lending, more than half of the value of all commercial and industrial loans made by domestic banks in the United States is currently secured by collateral (Leitner, 2006).

[2] Collateral can be used to alleviate financial frictions originated by moral hazard and adverse selection effects. See, for example, Aghion and Bolton (1992), Hart and Moore (1994), Hart (1995), Hart and Moore (1998), Bester (1985), Chan and Thakor (1987), Boot, Thakor and Udell (1991), and Boot and Thakor (1994). Berger and Udell (1990) suggest that firms with long-term relationships with a lender are less likely to pledge collateral. Stulz and Johnson (1985) show that secured debt enhances firm value since it reduces the incentive to underinvest, which is the case when a firm relies on equity or unsecured debt. Degryse, Kim, and Ongena (2009) review the empirical evidence on collateral and bank-firm relationships.

We begin our empirical analysis by investigating the impact of a firm's financial distress on the selling price of their real estate properties. We use various proxies for financial distress such as leverage, industry-adjusted leverage, interest coverage ratio, and an indicator for highly levered firms with low current assets proposed by Pulvino (1998). Consistent with the anecdotal evidence, we find that increasing a firm's leverage from the lowest tercile to the highest tercile corresponds to 22.1% lower selling price after controlling for a battery of property and seller characteristics.

Assets sold by a distressed firm may be of lower quality if the firm has taken actions that could potentially reduce the quality of the sold assets. For example, a distressed seller is more likely to neglect real estate property maintenance and instead use funds for more immediate purposes, such as servicing a loan due in a short period of time. It is also possible that the same factors that initially placed a firm in a distressed state may also affect the price of the sold asset. An underperforming CEO is more likely to lead the firm into distress and lack the efficiency to find better deals for the sold asset. In this scenario, the correlation between a discount and financial distress indicates an unobserved CEO characteristic that is correlated with both factors, but does not necessarily indicate a relationship between seller distress and discounted real estate prices. Our data allow us to investigate metrics that potentially capture the intentions of buyers in a transaction. For example, we observe whether the buyer intention is to renovate, redevelop, occupy, or keep the property as is to sell later (i.e., investment). For certain types of assets, we can even observe occupancy rate, which is defined as the floor space or units occupied by tenants as a percentage of the total leasable area of the building. These measures are useful as they are likely to capture the quality status of real estate at the time of the transaction. An asset purchased with the intention of renovating later is more likely to fetch a lower price since renovation is likely to remedy deficiencies of the property. Likewise, a real estate asset that is not occupied at higher rates signals low demand for the asset, which may be reflective of how well the property has been maintained. Our results survive after controlling for asset quality using buyer intention, occupancy rate or tenancy, indicating that asset quality is not likely to explain the finding that financially distressed firms sell their properties for lower prices.

We rely on fire sales literature to investigate other factors that could be important determinants of the liquidation values of real estate assets. These factors are asset redeployability and availability of potential buyers. An office can be purchased and used by several buyers both within and outside of the seller's industry; thus offices are redeployable assets. A distribution center with a specific layout, however, is not a redeployable asset since it can only be utilized by a buyer that bears similar characteristics as the seller, such as industry, location, and customer base. Our results show that assets that are redeployable do not suffer large discounts in case of distress, unlike specialized assets.

Shleifer and Vishny (1992) suggest that significant discounts in asset prices can occur if a financially distressed seller is forced to look for transaction opportunities when the best users of the asset are also constrained. The price of a distressed firm's asset is affected simply because potential bidders are operating in similar business lines and are subject to similar shocks. Commercial real estate assets have specific locations that allow us to develop several measures to capture the level of interest in the sold asset.[3] If an asset is located in an area where the number of potential buyers is low, higher discounts can be expected. Using three different measures of potential buyers based on the spatial distribution of industries and firms across the United States, we find that assets are likely to be priced higher in areas with more potential buyers. Furthermore, our results indicate

[3]Commercial real estate assets differ from other types of assets that have been studied in literature. Pulvino (1998), for example, uses a large sample of commercial airline transactions in order to show that airlines with low spare debt capacities sell aircraft at a 14% discount relative to the average market price. While commercial aircraft is a very specialized asset type that is likely to be subject to a discount, it is difficult to test the specific predictions of Shleifer and Vishny (1992) using an asset that is hardly redeployable in other industries. Financial assets also result in deep discounts if sellers are motivated to unload the positions quickly. For example, Coval and Stafford (2007) estimate more than 10% gains from buying stocks that experience price pressure due to mutual fund outflows. Albuquerque and Schroth (2015) present evidence that the sale of block holdings might occur at discounts due to search frictions. Finally, Chu (2013) tests the fire sale theory in the context of bank-owned commercial real estate sales during the 2008 financial crisis.

that the number of potential buyers alleviates the discount on distress sales significantly.[4]

After we establish asset redeployability and the number of potential buyers as important determinants of the price in a distress sale, we investigate whether banks' pricing of loans reflect these determinants. More specifically, we estimate how much a firm's real estate portfolio would lose value (relative to its current value) in a hypothetical state of the world where the firm is in financial distress. Our results show that a one standard deviation increase in our collateral discount measure is associated with a 13 basis points (0.11 standard deviation) decrease in loan spreads. This result complements Benmelech and Bergman (2009), who find that asset redeployability is adversely related to credit spreads.[5]

An important endogeneity concern in our research design is that determinants of collateral value (i.e. asset redeployability and/or number of potential buyers of the real estate asset) can be correlated with unobserved firm characteristics. Since these unobserved firm characteristics can affect loan spreads, a correlation between real estate discount and bank loan rates would not necessarily imply a causal relation. In order to investigate this issue deeper, we use significant surges of foreign investor demand from countries with increased policy uncertainty as an exogenous shock to commercial real estate prices. Our identification strategy is primarily motivated by the Badarinza and Ramadorai (2016) who show that political and economic uncertainty in Southern Europe, China, and East Asia effects prices of houses in London areas with high shares of people originating from these regions of the world. Our primary conjecture is that political and economic uncertainty in other countries will cause some foreign investors

[4]Gan (2007) shows that a negative shock to collateral leads to reduced debt capacities and investments of firms. Recent literature on the real effects of collateral supply shocks focuses on real estate collateral. Chaney, Sraer, and Thesmar (2012) focus on the effect of real estate prices on corporate investment. Mian, Rao, and Sufi (2011) and Mian and Sufi (2011) document the effect of housing prices on household consumption both in the house price run-up of 2002–2006, and in the economic slump of 2007–2009. Adelino, Schoar, and Severino (2015) and Schmalz, Sraer, and Thesmar (2013) look at the impact of house prices on entrepreneurial activity.

[5]Our results are broadly consistent with Granja, Matvos and Seru (2014) who show that most failed banks are sold very locally such that a geographically proximate bank is more likely to acquire a failed bank.

to invest in the U.S. commercial real estate markets, and this demand will increase real estate values of firms' collateral. If our conjecture is correct, following heightened uncertainty in a given country, we would expect to see relatively higher prices in areas where foreign demand has increased, over and above the general level of real estate prices for the specific property types. We show that firms which happen to have assets in locations that experience this presumably exogenous price appreciation enjoy lower bank rates that we attribute to increased collateral values. Our results show that the impact of collateral discount on loan spreads is muted for firms with real estate holdings in regions that experience increased foreign investor demand.

2 Data and Summary Statistics

We use the Real Capital Analytics (RCA) database to identify commercial real estate transactions. This database tracks commercial property and portfolio sales in the U.S. of $2.5 million or greater since 2000. RCA's data sources include press releases, news reports, SEC filings, public records, and listing services. As of 2015, the RCA database includes a total of over $3 trillion U.S.-based commercial real estate deals. Each record in the database contains both property- and transaction-specific information. The property characteristics include property size, physical address, year built, an indicator for the year the property was renovated, an indicator for whether the property is purchased within a portfolio, and an indicator for whether the property is located in a central business district (CBD). The geographic region of the property is denoted by an RCA Market identifier, which is an RCA-defined metropolitan area.

We identify both the seller and the buyer of the industrial, retail, and office properties by their full legal corporate names. We also hand match RCA seller names with firms in the Compustat Annual Files. Since the capital structure of financial firms (SIC code between 6000 and 6999) is significantly different than the capital structure of industrial firms, we focus only on industrial companies. We also exclude real estate investment trusts (SIC code 6798), as they buy or sell real estate for investment purposes. Utility firms (SIC codes between 4900 and 4999) and government entities (SIC code between 9000 and 9999) are also excluded. Our matching procedure yields 327 unique public firms that were involved in 2,274 transactions. Because our interest lies in relative prices, we use remaining transactions whose sellers are not Compustat firms to calculate the implied price of a property with the same property characteristics, in the same location (RCA Market), and in the same quarter. We obtain firm characteristics from Compustat Annual Files.

Data allow us to group each property type into subgroups based on certain asset features. For example, industrial properties include warehouses and flex assets, where the property can be used for both industrial and office activities. Retail properties include malls and strip centers. Offices are divided into two subtypes based on their location as either central business district or suburban area.

In Table 1 we summarize the characteristics of the properties and of the sellers (Table A1 in the Appendix provides the details of variable construction.) Panel A reports the summary statistics for the company-level and property-level variables. One of the most important differences between the sellers and an average Compustat firm is size. Since the transactions in our sample exceed \$2.5 million, our RCA sample is composed of medium and large firms. Median size, measured by natural logarithm of total assets, in our sample is 9.786, whereas Compustat median for the same time period is 5.347. Secondly, the median firm in the RCA sample is more profitable, and has more tangible assets relative to the median firm in Compustat. In the Compustat universe, median tangibility is 0.135, and median ROA is 0.054, whereas in our sample they are 0.397 and 0.150, respectively. Finally, book leverage and industry-adjusted book leverage are higher for sellers compared to the average firm in Compustat. The average property in our sample is about 22 years old and the average price per square footage is \$130. About 12% of the properties in our sample have been renovated before, and 33.4% of the sales are part of a portfolio transaction. Panel C of Table 1 shows the distribution of sub-property types for *Industrial*, *Retail* and *Office* properties. *Flex* denotes a property that is flexible in that it can be used for industrial or office activities. While 37.29% of the properties in our sample are industrial, retail properties constitute 44.28% and offices constitute 18.43% of our sample. Panel D of Table 1 also indicates that 28% of the properties in our sample were vacant at the time of the sale and 75% of the buyers' main intention was investment.

3 Real Estate Asset Discount

The price of commercial real estate sold by distressed sellers is significantly lower than the average transaction price in the rest of the sample.

In Panel A of Table 2, we report averages of unit property prices, defined as the natural logarithm of price per square feet plus one. We split the sample into three equal-size groups depending on the seller's *Industry-Adjusted Leverage* (at 33^{rd} and 67^{th} percentiles of the sample). Average transaction prices for *Low*, *Medium* and *High Industry-Adjusted Leverage* groups are 4.698, 4.512 and 4.184, respectively. The univariate analysis suggests there are significant differences between the average prices of leverage terciles, suggesting highly levered firms sell real estate at significantly less prices.

To control the effect of confounding factors on the correlation between distress measures and real estate discount, we estimate a model that directly relates the selling price to financial distress. Explanatory variables include various property-specific variables such as the logarithm of the property size, property age dummies, a dummy variable indicating whether the property is renovated at any point in time, a dummy variable indicating whether the property is purchased within a portfolio, a CBD dummy indicating whether the property is located in a central business district, and RCA market fixed effects as physical location controls.

In this specification, we include controls for the geographical location of the property, the quarter in which the transaction was completed, as well as the seller's characteristics.[6] Results in Table 2 Panel B show a strong negative relationship between the selling price and the seller's leverage ratio tercile. When all the control variables are included, an increase from the lowest leverage tercile to the highest leverage tercile leads to a 24% decrease in price with other variables held constant. This finding is consistent with the real estate appraisers' estimate that rapid real estate sales lead to price discounts of 15% to 25% relative to orderly sales (Shleifer and Vishny, 1992).[7]

We conduct a battery of robustness tests for the baseline model presented in column (4) of Table 2 Panel B. First, we use several alternative distress proxies, namely *Industry-Adjusted Leverage*, *Leverage*, *Leverage Tercile Dummies*, *High Leverage & Low Current Asset Dummy* and *Interest Coverage Ratio.* Panel A of Table A2 reports the results which point to the same conclusion: The price of commercial real estate sold by distressed sellers is significantly lower than the average transaction price in the rest of the sample.

In Table A3, Panel A, we estimate the baseline model using several different specifications. In column (1), we restrict the sample to the period before 2007. In column (2), we include the seller's industry fixed effects, where the industries are defined according to two-digit SIC codes. Column (3) focuses on the transactions that are not conducted as part of a portfolio sale. Finally, in the last column, we restrict the sample to properties that are located outside the state of the seller's headquarters. Note that this specification addresses the possibility of local economic conditions simultaneously affecting real estate prices and the seller's financial health. Results show that our findings are not driven by the recent financial crisis, portfolio sales, or shocks to local economy. While controlling for industry fixed effects decreases the economic

[6] We define geographical market fixed effects and quarter fixed effects for each property type separately so that we can control for seasonal trends and time-invariant market-specific trends in certain property types. All company-level variables are measured at least one month and at most eleven months before the transaction date, depending on the selling firm's fiscal year end. Standard errors are clustered at the firm level. Results are robust to two-way clustering at the RCA market and quarter levels.

[7] Note that because the dependent variable equals the logarithm of 1 plus the transaction price, the discount is calculated by taking the exponent of the coefficient. For example, the discount associated with the selling firm's leverage being in the highest tercile equals $1 - exp(\beta_2)$, which is the percentage change in 1+price if the selling firm's leverage changes from the lowest- to the highest-leverage tercile.

significance of the coefficient estimates for our distress measures, the statistical significance of the coefficient estimates is similar to those estimated in the baseline model.

If the factors that forced the seller to dispose assets at unfavorable prices have also reduced the quality of assets sold, then prices reflect the most up-to-date quality of the assets. Consequently, the finding that distressed sellers transact at lower prices suggests that these properties may be lower quality. Fortunately, our data allow us to observe the buyer intentions that can serve as a proxy for whether buyers are willing to spend extra resources to make the assets more appealing/functional for future usage. Specifically, we can observe whether the purpose of the transaction is to occupy, renovate, redevelop, or invest. Renovation and redevelopment indicate further commitment, thus potentially requiring buyers to bid lower. We also observe tenancy status as well as occupancy rate which capture the quality status of a property at the time of the transaction.

In Panel C.1 of Table 2 we regress the residual price on each of the quality proxies, namely buyer purpose, tenancy status and occupancy rate. *Buyer Purpose* can be investment, occupancy, redevelopment or renovation. *Tenancy Status* is the occupancy type at the time of a sale, which can be multi-tenant, single tenant or vacant. *Occupancy Rate* is defined as the floor space or units occupied by tenants as a percentage of the total leasable area of the building. Results in columns (1)-(3) confirm our prior findings: unit price is lower for properties to be renovated after the purchase, vacant properties and properties with low occupancy rate. In columns (4)-(6) of Panel C.1, we regress unit price on each of the quality proxies and the industry-adjusted leverage dummies in order to test whether quality accounts for the impact of leverage on prices. The coefficient estimates for the leverage dummies are significant and their magnitudes are similar to those in our baseline estimation indicating that our financial distress proxies are not significantly related to the quality of the properties being sold. In Panel C.2, we repeat the analysis for *High Leverage & Low Current Asset Dummy* and *Interest Coverage Ratio*. Overall, results suggest that asset quality, as measured by the proxies we observe, does not vary between financially healthy and distressed sellers.[8]

We now turn our attention to the link between real estate prices and asset redeployability. As discussed before, the main prediction of Shleifer and Vishny (1992) is that an asset should sell for less if it is of use to fewer buyers. Our dataset allows us to identify the properties that are potentially more redeployable than others. Since the same office can be used by firms from different industries, on average, we expect offices to be demanded more than other property types. The variable *Flex* indicates whether a property is flexible in that it can be used for both industrial or office activities. Similar to offices, we also expect such properties to attract a larger investor base.

In order to capture the incremental impact of asset redeployability on prices, we estimate our baseline specification including interactions between office dummies and various distress proxies. We also include interactions between office dummy and our control variables to account for the impact of offices on unit price through channels other than firm distress. The results from multivariate analysis, reported in Panel A of Table 3 indicate that the impact of firm distress is significantly muted for offices and flexible properties, which suggests that generic assets such as offices indeed get better prices when they are sold by distressed sellers.

If an asset is located in an area where the number of potential buyers is limited, we expect higher discounts. This expectation is motivated by Almazan et al. (2010) who investigate the relation between firms' locations and their corporate finance decisions. They argue that being located within an industry cluster increases opportunities to make acquisitions, and to facilitate those acquisitions, firms within clusters maintain more financial slack. Almazan et al. (2010) find that firms located within industry clusters make more acquisitions, and have lower debt ratios and larger cash balances than their industry peers located outside clusters. Motivated by the prevalence of local factors in shaping financial transactions, we test whether the discount is stronger in concentrated

[8] In unreported results, we estimate a regression equation where asset quality is the dependent variable and the leverage dummies are the explanatory variables. The coefficient estimates for the leverage dummies are insignificant.

industries, where there is a smaller group of potential buyers who could pay for the best-use price. Our study complements Almazan et al. (2010) by showing that being located in an industry cluster positively affects the transaction price of commercial properties and alleviates the negative impact of distress.

We use three different measures to capture the number of potential buyers. Our first measure is *1-Herfindahl Index* where Herfindahl Index is the sum of squared market shares of firms in the seller's three-digit SIC industry. Second, we calculate the number of companies in the seller's three-digit SIC industry who mentions the state of the property in 10-Ks at least once during the transaction year (Garcia and Norli, 2012).Our last measure is the number of companies in the seller's three-digit SIC industry whose headquarters are located in the same state as the property.

Panel B of Table 3 present the results. In columns (1), (4) and (7), the coefficient estimates for all three measures are positive and significant, indicating that average residual price is higher when there are more firms that might potentially be interested in buying the property. Columns (2), (5) and (8) report the coefficient estimates for the number of potential buyers proxies as well as for their interactions with the seller's leverage tercile. The coefficient estimates for the interaction between the high-leverage indicator and the number of potential buyers measures are all positive and statistically significant. For instance, for the measure calculated using headquarters, the coefficient estimate of the interaction term is 0.127 and the direct effect of high leverage is –0.430. This implies that a one standard deviation increase in the logarithm of number of potential buyers (1.22) decreases the impact of high leverage from –0.430 to –0.275. Columns (3), (6) and (9) report the results for *Industry-Adjusted Leverage* included as a continuous variable. The interaction term between *Industry-Adjusted Leverage* and all three potential buyer proxies have positive coefficient estimates that are significant at 5-10% level. Collectively, these results suggest that the discount is low or does not exist when there are more potential buyers.

Real estate assets can be considered as a composite good which can be reduced to its constituent parts. Hedonic models are often used to find the market value of those constituent parts. As a robustness test, we run a hedonic model in which selling price is estimated as a function of a detailed set of property characteristics using a larger sample of transactions. Column (1) and (2) of Table A4 report the results from the first-stage model estimated. In these regressions, we include RCA Market-Year fixed effects which controls for market-wide events throughout the year. Results show that smaller properties, renovated properties, and properties in central locations have higher values. Next, we estimate *Residual Price* as the difference between actual price and the estimated price, which represents the estimated value of a real estate based on its observable characteristics. Columns (3)-(6) of Table A4 show that our leverage dummies and residual price are negatively related. The economic significance of distress on prices is comparable to those estimated in Table 2: an increase from the lowest leverage tercile to the highest leverage tercile leads to a 22.1% decrease in the residual price. In Table A5 and A6, we repeat our main tests reported in Tables 2C and Table 3 using residual prices estimated from the hedonic model. We find that results are robust to this methodology change that uses residual prices instead of unit property prices.

4 Real Estate Holdings and Loan Spreads

In this section, we investigate whether firms' cost of debt are related to the their real estate portfolios' features. To do this, we first estimate the discount in the dollar value of a firms real estate portfolio in a hypothetical distress scenario relative to its current value, and then test whether banks' pricing of commercial loans reflects this discount.

4.1 Collateral Discount

Our analysis in section 3 shows that from two identical sellers, on average, the one that is financially less healthy will get a lower price. Moreover, this negative effect is weakened for offices and properties with quite a few potential buyers. Using this insight, we estimate the current value of a firm's real estate portfolio and its value in a hypothetical distress case. The ratio of these two values indicate how much of a real estate discount that the firm will suffer when it gets financially distressed.

To execute this idea, we first construct the real estate portfolios of companies using all the transactions contained in the RCA database. These transactions help us to identify the date when the property was acquired and when it was disposed. After constructing real estate portfolios from transaction data, we estimate the unit price for each of the firm's properties twice, first assuming that the leverage equals the firm's current industry-adjusted leverage (*Current Portfolio Value*), and then assuming that the leverage is 23% higher than the industry median (*Hypothetical Portfolio Value*).[9] To estimate the unit price, we use the specifications in Panel A and B of Table 3 which report the positive impact of redeployability and potential buyers on distress discount. More specifically, we use the models in column (2) of Panel A and column (6) of Panel B, respectively.[10] These specifications account for property characteristics (size, age, renovated dummy, CDB dummy), firm controls (size, ROA, tangibility, market-to-book), RCA market fixed effects (defined for each property type separately), year fixed effects (defined for each property type separately), as well as the direct effects of office dummy and the number of potential buyers measure. Notice that the contribution of these variables to the estimated values of *Current Portfolio Value* and *Hypothetical Portfolio Value* are the same. The difference between these two portfolio values mainly result from the direct impact of a firm's leverage and its interaction with asset redeployability and the number of potential buyers. Finally, we multiply the estimated unit prices by the size of each property and sum over all properties to calculate the *Current Portfolio Value (PV)* and *Hypothetical Portfolio Value (PV)*.

$$Current\ PV_t = \sum_{i}^{N} Size_i \times E[Price/sqf | Current\ Leverage_{i,t}]$$

[9]23% refers to the 90th percentile value of the industry-adjusted leverage in our sample. We obtain similar results with 20% and 30% cutoff values.

[10]We replace quarter fixed effects with year fixed effects to make it consistent with the annual accounting data. Results are robust to this alternative time fixed effects.

$$Hypothetical\ PV_t = \sum_{i}^{N} Size_i \times E[Price/sqf | Hypothetical\ Leverage]$$

We define the expected collateral discount as follows[11]

$$Collateral\ Discount_t = Current\ PV_t / Hypothetical\ PV_t \text{ - } 1$$

RCA only tracks transactions that are above a certain threshold (2.5 million USD), therefore our current and hypothetical portfolios are tilted toward large properties. Because our collateral discount measure is the ratio of the two portfolio values, we do not expect the *Collateral Discount* to be over or understated due to RCA's coverage choice.

To investigate whether loan spreads vary with expected collateral discount, we obtain loan-level data from Loan Pricing Corporation's (LPC) Dealscan database which contains detailed information about commercial (primarily syndicated) loans made to US corporations since the 1980s. According to Carey and Hrycray (1999), the Dealscan database contains between 50% and 75% of the value of all commercial loans in the US during the early 1990s with increased coverage after 1995. Our initial sample contains all commercial loans denominated in US dollars. We link Dealscan dataset to the Computstat database using the links provided by Chava and Roberts (2008). While each observation in the Dealscan database represents a facility (or a tranche), multiple facilities with similar loan terms and pricing are frequently packaged into deals. Following Hertzel and Officer (2012), we choose the largest tranche in each deal as our unit of observation. We require non-missing data on loan amount, loan maturity, loan type and loan purpose.[12]

Following the literature, we evaluate loan prices using all-in-drawn spread, which is

[11] In few instances where *Current PV* is less than *Hypothetical PV*, we normalize the ratio between *Current PV* and *Hypothetical PV* to unity.

[12] Loan types are indicators for term loans, revolver loans, 364-day facility and others. The primary purpose of the facilities in our sample are corporate purposes, debt repayment, working capital, and acquisition-related (including mergers, LBOs and takeovers).

the rate a borrower pays in basis points over LIBOR including any recurring annual fees on the loan. Our final sample consists of 1,193 loans with a median (mean) spread of 75 (121.65) basis points.

Table 4 reports the results from the regression of the loan spread on *Collateral Discount*, and loan- and firm-level controls. In all regressions, we control for industry-adjusted leverage, which accounts for the direct impact of leverage on the estimated collateral discount. Thus, the variation in *Collateral Discount* results from either the interaction of industry-adjusted leverage with the office indicator or with the number of potential buyers. In columns (1)–(3), we use redeploybility levels, and in columns (4)–(6) we use the number of potential buyer interactions to estimate the wedge between the current and hypothetical portfolio values. Our results in columns (1) and (4) indicate a positive relationship between loan spreads and our collateral discount measure after controlling for firm leverage, industry fixed effects, and year fixed effects. More specifically, a one standard deviation (12%) increase in expected collateral discount (resulting from asset redeployability) is associated with about 13.47 basis points higher loan spread which translates into a 0.11 standard deviation increase in loan spread.

In columns (2) and (5), we control for the current value of real estate holdings so that we can account for the variation in *Collateral Discount* that results from the current value of the properties. The coefficient estimates are very similar to those reported in column (1) which suggests that our results are mainly driven by the hypothetical portfolio value.

A property that was never traded between 2000 and 2013 is not observed in our real estate portfolios. Because we do not observe the unit price of such non-traded real estate assets, we can not determine their contribution to the collateral discount. However, in unreported analysis, we find that firms choose to sell the assets that are less likely to be discounted in distress, indicating that collateral discount coefficient is underestimated if the size of the non-traded property is significantly larger than that of all traded properties for all firms. In our sample, the average ratio of the real estate portfolio value to tangible assets is 8.38%.[13] Because tangible assets include several asset types such as machinery, this ratio presents considerable variation across industries. For example, industries that employ large amounts of heavy equipment (such as airlines or mining) have a mean ratio of less than 1%. For industries that are more likely to own real estate properties (such as retail), the ratio goes up to 17%. In our specification, industry fixed effects enable us to capture across-industry variation in terms of share of real estate properties in the tangible assets. Moreover, we include the value of property, plant and equipment (scaled by total assets) to capture the effect of tangible assets on loan rates (see Acharya et al., 2013).[14]

Strahan (1999) investigates the impact of non-price terms of loans on loan pricing and shows that although secured loans have higher expected rates of recovery in default, they carry 32% to 51% higher interest rates than unsecured loans. Furthermore, loans to small firms, firms with low ratings, and firms with little cash available to service debt are more likely to be secured by a collateral. Consistent with the literature, we find that the average spread is higher for secured loans. In columns (3) and (6), we interact our collateral discount measure with the *Secured Loan Dummy.* The coefficient estimate of the interaction term is positive suggesting that collateral discount is an important factor in pricing particularly of those loans that are backed by a collateral. The coefficient estimates of both the secured loan indicator and our collateral discount variable are positive, but the estimate for collateral discount is not statistically significant.

To sum up, our findings suggest that when banks price a collateral, they consider marketability of a borrower's real estate portfolio in case of a distress scenario. A borrower with assets that are not redeployable for alternative uses borrows at higher rates. Likewise, a borrower faces a higher loan rate if its real estate assets are located in an area where potential buyers in that geographical region are limited, and when the

[13] In 1993, the last year in which the SEC required firms to report the accumulated depreciation of buildings, 54% of Compustat firms reported some real estate ownership on their balance sheet (Cvijanovic (2014)).

[14] Controlling for the size of real estate holdings relative tangible assets does not change our results.

industry is concentrated and few firms are able to pay for the best-use price. The link between a firm's real estate holdings and bank loan rates collaborates the findings of Benmelech and Bergman (2009) which show that debt tranches that are secured by more redeployable collateral exhibit lower credit spreads. Using evidence from airline industry, Benmelech and Bergman (2009) point out that the previously documented positive correlation between the existence of collaterals and loan prices could be misleading because of endogeneity and selection bias. Our findings complement their findings by showing a similar relation between prices of an asset type that is frequently used in almost all industries and loan prices.

4.2 Foreign Investment as a Shock to Collaterals and Loan Spreads

Our analysis in the previous section suggests that capital markets price a potential decrease in the collateral value in a distress state. This result mainly follows from the variation in the location and types of properties that firms hold in their real estate portfolios. In order to address the endongeneity issues, we investigate the differential impact of sudden increases in foreign real estate investment on firms with high and low collateral discount. More specifically, we expect the loan spreads of firms with high collateral discount to be affected more negatively from sudden increases in foreign investment.

Our primary conjecture is that political and economic uncertainty in other countries will cause some foreign investors to invest in the U.S. commercial real estate markets and this demand will increase real estate values of firms' collateral. If our conjecture is correct, following heightened uncertainty in a given country, we would expect to see relatively higher prices in areas where foreign demand has increased, over and above the general level of real estate prices for the specific property types.

In Table 5, we investigate the link between commercial real estate prices and foreign investment. In Panel A, we regress the average price per square feet for the property types *Apartment, Industrial, Office*, and *Retail* in a given RCA market. Since average prices are defined at the property type level, we can control for property type fixed effects as well as quarter and market fixed effects. The results show that after controlling for various factors, increased foreign demand is accompanied by higher commercial real estate prices in the U.S. A $100 dollar increase in foreign investment generates about $1.2 increase average prices. In Panel B, we repeat the same analysis this time using our transaction-level data which yields consistent results with Panel A.

After establishing the link between property prices and foreign investment, we turn our attention on investment from countries with increased policy uncertainty in order to improve the exogeneity of sudden increases in investment. Each year, we calculate the change in average (monthly) policy uncertainty index of Baker, Bloom, and Davis (2011) that is available for Australia, Canada, China, France, Germany, India, Italy, Japan, Netherlands, Russia, South Korea, Spain, UK. We assign a country to "high policy uncertainty" category if its policy uncertainty index is in the top quintile of its time-series distribution.

In order to detect property types and markets with abnormal investment from high-risk countries, we first estimate the residuals from the following regression

$$Ln(Investment\ from\ High\text{-}Risk\ Countries_{i,j,t} + 1) =$$

$$\beta_0 \ + \ \beta_1 \ Ln(Foreign\ Investment_{i,j,t} + 1)$$

$$+ \ \beta_2 \ Region \times Year\ FE \ + \ \beta_3 \ Market \times Property\ Type\ FE + \varepsilon_{i,j,t}$$

where i denotes the property type, j is the RCA market that the property is located in, and t denotes the year of investment. Note that with this specification, we can control for total foreign investment in a market and year. We assume a property is exposed to abnormal foreign investment from high policy uncertainty countries if the predicted residual for its type and market is in the top 10% of the distribution. We define *Exposure to High-Risk Countries* as the percentage of the value of a firm's real estate portfolio that is exposed to abnormal investment from countries with increased policy uncertainty. Since foreign investment data starts in 2001, the sample period is restricted to 2002-2013.

Columns (1) and (4) of Table 6 reports the results from the regression of loan spreads on *Exposure to High-Risk Countries*. Results indicate that firms with property types that are exposed to increased foreign demand pay about 31 basis points less interest on bank loans.

Next, we split the sample into five quintiles with respect to our collateral discount measure, and define *High Collateral Discount* dummy variable that indicates whether a firm is in the top discount quintile. In columns (2) and (5) of Table 6, we interact *High Collateral Discount* with *Exposure to High-Risk Countries*. In all specifications, the coefficient estimate for our collateral discount measure is positive and significant. Consistent with our prior, the interaction term has a negative coefficient estimate, suggesting that increased foreign investment reduces loan spreads by 40 basis points more for firms in the top quintile of collateral discount. In other words, firms which happen to have assets in locations that experience this presumably exogenous price appreciation enjoy lower bank rates that we attribute to increased collateral values. Although, the direct effect of *Foreign Exposure Dummy* is negative, it is not statistically significant.

Finally, we interact *Exposure to High-Risk Countries* with the secured loan indicator in order to test whether collateral discount has any additional impact on loan spreads. This additional interaction term does not change the coefficient estimate of the interaction between *Exposure to High-Risk Countries* and *Collateral Discount* suggesting that our discount measure contains information that cannot be accounted for by the secured status of a loan.

Conclusion

Our paper contributes to our understanding of how commercial real estate assets affect collateral values and the cost of debt. Evidence suggests that sellers' distress matters as predicted by Shleifer and Vishny (1992) and banks price loan spreads such that they increase with expected real estate discounts. We document that information regarding the expected commercial real estate discounts has a significant impact on loan spreads because of the collateral channel and firms seek to sell the assets that are less likely to be discounted. In line with Shleifer and Vishny (1992), if real estate assets have alternative uses or are located in areas with more potential buyers, the discount is significantly mitigated or eliminated completely. More importantly, we do not find evidence that distressed assets in our sample are of lower quality. If anything, distressed sellers are more likely to sell their better assets to mitigate the rushed sale discount. Using significant surges of foreign investor demand from countries with increased policy uncertainty as an exogenous shock to commercial real estate prices, we find that the firms which happen to have assets in locations that experience this presumably exogenous price appreciation enjoy lower bank rates that we attribute to increased collateral values.

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Table 1: Descriptive Statistics

This table summarizes the characteristics of the properties and the sellers we analyze in this study. Our sample is restricted to properties sold by non-financial firms, and covers the period between 2000 and 2013. Panel A reports the summary statistics for the company-level variables. *Leverage* is the ratio of total book debt to book value of assets, *Industry-Adjusted Leverage* equals book leverage minus median industry leverage, where industries are defined by the three-digit SIC codes, and it is required that there are at least five firms operating in each industry. *High Leverage & Low Current Assets Dummy* indicates that the seller's leverage is above the industry median and its current assets are below the industry median. *Interest Coverage Ratio* is the ratio of income before depreciation divided by interest expense, for which the negative values are normalized to zero and values above 50 are normalized to 50. *Tangibility* is defined as the ratio of property, plant, and equipment (PPE) to total assets, return on assets (*ROA*) is defined as operating income scaled by total assets, and *Market-to-Book Ratio* is the ratio between the market value and the book value of total assets. All ratio variables are winsorized at the top and bottom 2.5%. Panel B reports the summary statistics for property characteristics. *Unit Property Price* equals the natural logartithm of price per square feet plus one. *Size* is the natural logarithm of property size measured in square feet ($Ln(sqf)$). *Renovated* equals one if there is non-missing data for the year that the property was renovated or expanded. *Portfolio* indicates that the sale is part of a portfolio transaction. *CBD* is a dummy variable that takes one if the property is located in a central business district or in the downtown of a city. *Occupancy Rate* is defined as the percentage of floor space or units occupied by tenants as compared to the total leasable area of the building at the time of a sale. Panel C shows the distribution of subtypes for *Industrial*, *Retail* and *Office* properties (In each property type category, for about 2% of the observations the subtype is missing.) *Flex* denotes a property that is flexible in that it can be used for industrial or office activities. Panel D shows the distribution of properties by *Vacancy* and *Buyer Purpose*. *Single Tenant* is a property that was fully occupied by a single user. *Vacant* indicates that the property was not occupied at time of sale. *Occupancy* is a buyer's objective representing a property that is purchased for use by the buyer in the conduct of business.

Panel A: Company Characteristics	Mean	St. Dev.	p25	Median	p75	N
Leverage	0.262	0.161	0.155	0.258	0.353	2,274
Industry-Adjusted Leverage	0.059	0.174	-0.051	0.055	0.179	2,274
Interest Covarage Ratio	15.979	15.865	4.568	9.196	21.802	2,218
High Leverage & Low Current Asset Dummy	0.403	0.491	0	0	1	2,175
ROA	0.136	0.084	0.088	0.150	0.178	2,274
Tangibility	0.365	0.184	0.196	0.397	0.541	2,274
Market-to-Book	1.448	0.897	0.849	1.265	1.702	2,274
Ln(Assets)	9.473	1.629	8.219	9.786	10.421	2,274

Panel B: Property Characteristics	Mean	St. Dev.	p25	Median	p75	N
Ln(Price/sqf)	4.467	0.939	3.812	4.518	5.128	2,274
Ln(sqf)	11.414	1.298	10.659	11.501	12.268	2,274
Age	21.991	18.332	9	18	31	2,274
Renovated Dummy	0.120	0.325	0	0	0	2,274
Portfolio Dummy	0.334	0.472	0	0	1	2,274
CBD Dummy	0.051	0.219	0	0	0	2,274
Occupancy Rate	0.777	0.402	0.86	1	1	1,649

Table 1 Cont.: Descriptive Statistics

Panel C: Property Subtypes

Type	Frequency	Percent
Industrial		
Flex	244	28.47
Warehouse	21	69.1
N/A	583	2.43
Total	848	
Retail		
Mall	891	88.45
Strip	23	9.2
N/A	93	2.35
Total	1,007	
Office		
CBD	63	15.42
Sub	345	82.09
N/A	11	2.49
Total	419	

Panel D: Vacancy and Buyer Purpose

Type	Frequency	Percent
Vacancy		
Multi Tenant	262	13.48
Single Tenant	1,135	58.41
Vacant	546	28.10
Total	1943	
Buyer Purpose		
Buyer Purpose		
Investment	1,711	75.44
Occupancy	316	13.93
Redevelopment/Renovation	241	10.63
Total	2,268	

Table 2: Transaction Price and Firm Distress

Panels A reports the average selling price for sellers in different industry-adjusted leverage terciles. We split the sample into three equal-size groups depending on the seller's *Industry-Adjusted Leverage*. *Medium (High) Ind.-Adj. Leverage Dummy* takes one if the seller's industry-adjusted leverage is between the 33^{rd} and 67^{th} (above the 67^{th}) percentile of the sample. Panel B reports the results the results from the regression of *Unit Property Price* on industry-adjusted leverage dummies. Panel C investigates the impact of quality on *Unit Property Price*. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

Panel A: Univariate Analysis of Distress and Prices

Tercile	Average Unit Property Price	N		Difference in Avr. Unit Property Prices	t-stat
Low Leverage	4.698	759	High-Low	-0.515	(10.72***)
Medium Leverage	4.522	752	High-Medium	-0.339	(7.35***)
High Leverage	4.184	763	Medium-Low	-0.176	(3.76***)

Panel B: Multivariate Analysis of Distress and Prices

	Unit Property Price			
	(1)	(2)	(3)	(4)
Medium Ind.-Adj. Leverage Dummy$_{t-1}$	-0.201**	-0.184**	-0.208**	-0.191***
	(-2.070)	(-2.514)	(-2.567)	(-2.606)
High Ind.-Adj. Leverage Dummy$_{t-1}$	-0.307***	-0.260***	-0.350***	-0.277***
	(-3.478)	(-3.266)	(-3.854)	(-3.372)
ROA$_{t-1}$			-0.865**	-0.687**
			(-2.445)	(-2.052)
Tangibility$_{t-1}$			-0.131	-0.058
			(-0.895)	(-0.396)
Market-to-book$_{t-1}$			0.021	0.032
			(1.018)	(1.355)
Ln(Assets$_{t-1}$)			-0.001	-0.005
			(-0.036)	(-0.274)
Property Controls	Yes	Yes	Yes	Yes
Quarter FE		Yes		Yes
Market FE			Yes	Yes
Adjusted R-squared	0.459	0.616	0.580	0.617
Observations	2,274	2,274	2,274	2,274

Table 2 Cont.: Transaction Price and Firm Distress

Panel C: Asset Quality and Price

	Unit Property Price					
Panel C.1	(1)	(2)	(3)	(4)	(5)	(6)
Redevelopment or Renovation	-0.097*			-0.082		
	(-1.767)			(-1.488)		
Vacant		-0.373***			-0.349***	
		(-6.484)			(-6.711)	
Occupancy Rate			0.320***			0.306***
			(5.515)			(5.684)
Medium Ind.-Adj. Leverage Dummy				-0.175**	-0.164**	-0.194**
				(-2.400)	(-2.067)	(-2.513)
High Ind.-Adj. Leverage Dummy				-0.250***	-0.219**	-0.266***
				(-2.902)	(-2.439)	(-2.907)
Adjusted R-squared	0.609	0.615	0.606	0.617	0.621	0.615
Observations	2,268	1,949	1,649	2,268	1,949	1,649
Property Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes

Panel C.2	(1)	(2)	(3)	(4)	(5)	(6)
Redevelopment or Renovation	-0.092			-0.098*		
	(-1.635)			(-1.820)		
Vacant		-0.375***			-0.329***	
		(-6.807)			(-6.519)	
Occupancy Rate			0.322***			0.283***
			(5.754)			(5.319)
High Leverage & Low Current Asset Dummy	-0.150**	-0.132*	-0.175**			
	(-2.215)	(-1.900)	(-2.307)			
Interest Coverage Ratio				0.009***	0.007**	0.007**
				(3.048)	(2.498)	(2.229)
Adjusted R-squared	0.602	0.615	0.607	0.607	0.609	0.596
Observations	2,169	1,884	1,587	2,212	1,904	1,605
Property Controls	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes

Table 3: Asset Redeployability and Potential Buyers

This table investigates the impact of asset redeployability (Panel A) and the number of potential buyers (Panal B) on distress discount. *Office* is a dummy variable takes one for offices and for properties that can be used for both industrial or office activities. The number of potential buyers is measured by one of the following three variables: (i) *1-Herfindahl Index* is the Herfindahl Index of sales based on the firm's three-digit SIC industry, (ii) *10-K Count* is the number of companies in the seller firm's three-digit SIC industry who mentions the state of the property in its 10-Ks at least once during the year preceding the transaction (Garcia and Norli, 2012), (iii) *Headquarter count* is the number of companies in the seller firm's three-digit SIC industry whose headquarters are located in the same state as the property. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

Panel A: Asset Redeployability

	Unit Property Price			
	(1)	(2)	(3)	(4)
Medium Ind.-Adj. Leverage Dummy$_{t-1}$	-0.183**			
	(-2.132)			
X Office	0.110			
	(1.039)			
High Ind.-Adj. Leverage Dummy$_{t-1}$	-0.314***			
	(-3.226)			
X Office	0.244**			
	(2.099)			
Industry-Adjusted Leverage$_{t-1}$		-0.607***		
		(-3.404)		
X Office		0.395*		
		(1.681)		
Interest Coverage Ratio$_{t-1}$			0.010***	
			(3.265)	
X Office			-0.009**	
			(-2.413)	
High Leverage & Low Current Asset Dummy				-0.210***
				(-2.672)
X Office				0.197**
				(2.056)
Adjusted R-squared	0.638	0.636	0.629	0.625
Observations	2,274	2,274	2,218	2,175
Property Characteristics	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes
Office Interactions	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes

Table 3 cont.: Asset Redeployability and Potential Buyers

Panel B: Potential Buyers

	Unit Property Price								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1-Herfindahl Index	0.562***	0.233	0.437***						
	(3.962)	(1.400)	(3.519)						
10-K Count				0.044***	0.016	0.043**			
				(2.614)	(0.675)	(2.583)			
Headquarter Count							0.061***	0.014	0.063***
							(3.195)	(0.522)	(3.278)
Medium Ind.-Adj. Leverage Dummy		-0.263*			-0.188*			-0.212**	
		(-1.692)			(-1.962)			(-2.458)	
X Number of Buyers		0.105			0.005			0.033	
		(0.530)			(0.150)			(1.008)	
High Ind.-Adj. Leverage Dummy		-0.664***			-0.502***			-0.430***	
		(-3.916)			(-4.378)			(-4.469)	
X Number of Buyers		0.590***			0.108***			0.127***	
		(2.802)			(3.139)			(3.669)	
Industry-Adjusted Leverage$_{t-1}$			-1.442***			-0.979***			-0.827***
			(-2.730)			(-4.176)			(-4.083)
X Number of Buyers			1.171*			0.175**			0.162**
			(1.852)			(2.236)			(2.031)
Adjusted R-squared	0.618	0.627	0.624	0.610	0.623	0.620	0.611	0.624	0.620
Observations	2,274	2,274	2,274	2,274	2,274	2,274	2,274	2,274	2,274
Property Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Table 4: Loan Spreads and Collateral Discount

This table reports the results from the regression of loan spreads on *Collateral Discount* which is defined as the ratio of current real estate portfolio value (*Current PV*) to its hypothetical value (*Hypothetical PV*). *Current PV* is the sum of the predicted value of each property in the portfolio, and *Hypothetical PV* is the sum of the predicted value of each property in the portfolio assuming that the firm has a leverage ratio of within the 90th percentile in excess of its industry median. *Loan Spread* is all-in-drawn spread which is the amount the borrower pays in basis points over LIBOR including any recurring annual fees on the loan. Other variables are defined in Table 1. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Loan Spread					
	Asset Redeployability			Number of Potential Buyers		
	(1)	(2)	(3)	(4)	(5)	(6)
Ind.-Adj. Leverage$_{t-1}$	107.907***	110.933***	116.196***	123.035***	127.141***	138.157***
	(4.297)	(4.249)	(4.431)	(4.734)	(4.813)	(5.123)
Collateral Discount$_t$	112.280**	116.818**	36.585	98.084**	101.781**	54.706
	(2.190)	(2.218)	(0.587)	(2.153)	(2.215)	(1.308)
Secured Loan Dummy$_t$=Yes	75.085***	74.793***	57.701***	73.993***	73.653***	49.808***
	(8.677)	(8.565)	(4.297)	(8.552)	(8.456)	(3.673)
X Collateral Discount$_t$			161.206**			155.388***
			(2.241)			(2.832)
Secured Loan Dummy$_t$=Missing	4.233	4.362	-5.089	4.089	4.281	0.907
	(0.902)	(0.930)	(-0.665)	(0.871)	(0.915)	(0.106)
X Collateral Discount$_t$			88.725			17.978
			(1.405)			(0.412)
Ln(Portfolio Value$_t$)		1.720	1.329		2.124	1.743
		(0.591)	(0.460)		(0.731)	(0.609)
ROA$_{t-1}$	-363.428***	-361.376***	-358.162***	-358.160***	-355.702***	-351.403***
	(-5.694)	(-5.645)	(-5.657)	(-5.580)	(-5.541)	(-5.653)
Tangibility$_{t-1}$	25.807	23.947	24.384	28.715	26.498	26.660
	(1.418)	(1.271)	(1.374)	(1.530)	(1.370)	(1.493)
Market-to-book$_{t-1}$	-4.340	-4.465	-4.368	-4.401	-4.513	-4.064
	(-1.332)	(-1.371)	(-1.353)	(-1.362)	(-1.396)	(-1.294)
Ln(Assets$_{t-1}$)	-3.820	-4.461	-4.387	-4.148	-4.935	-5.154
	(-1.126)	(-1.273)	(-1.252)	(-1.198)	(-1.375)	(-1.434)
Ln(Loan Maturity$_t$)	-3.539	-3.599	-3.502	-4.645	-4.751	-5.520
	(-0.353)	(-0.358)	(-0.350)	(-0.473)	(-0.484)	(-0.580)
Ln(Loan Amount$_t$)	-11.766***	-11.810***	-12.223***	-12.010***	-12.067***	-12.410***
	(-3.304)	(-3.306)	(-3.443)	(-3.345)	(-3.348)	(-3.490)
Loan Type Dummy	YES	YES	YES	YES	YES	YES
Loan Purpose Dummy	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.675	0.675	0.676	0.676	0.676	0.680
Observations	1,193	1,193	1,193	1,193	1,193	1,193

Table 5: Foreign Investment and Commercial Real Estate Prices

This table investigates the impact of foreign investment on commercial real estate prices. Panel A reports the results for a panel of RCA markets where the dependent variable is *Average Unit Property Price* defined as the natural logarithm of average price per square feet for property types *Apartment, Industrial, Office*, and *Retail*. Panel B is estimated using transaction-level data, therefore the dependent variable is *Unit Property Price*. In both panels, *Ln(Foreign Investment)* refers to the total dollar amount of investment into a given market in a given quarter represented in millions plus one. The sample covers the period between 2001 and 2014. Standard errors are clustered at the market level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Average Unit Property Price					
Panel A: Market-Level Data	(1)	(2)	(3)	(4)	(5)	(6)
Ln(Foreign Investment)	0.076***	0.068***	0.030***	0.017***	0.017***	0.012*
	(4.723)	(4.026)	(7.789)	(3.950)	(3.729)	(1.684)
Property Type FE	Included	Included	Included	Included		
Quarter FE		Included		Included		
Market FE			Included	Included	Included	
Property Type X Quarter					Included	Included
Market X Quarter						Included
Observations	13,962	13,962	13,962	13,962	13,962	13,962
Adj. R-squared	0.354	0.385	0.640	0.679	0.686	0.695

	Unit Property Price					
Panel B: Transaction-Level Data	(1)	(2)	(3)	(4)	(5)	(6)
Ln(Foreign Investment)	0.056***	0.046***	0.019***	0.007**	0.007**	0.006
	(4.054)	(3.279)	(4.478)	(2.040)	(2.073)	(1.622)
Property Characteristics	Included	Included	Included	Included	Included	Included
Property Type FE	Included	Included	Included	Included	Included	
Quarter FE		Included		Included	Included	
Market FE			Included	Included	Included	
Property Characteristics X Property Type					Included	Included
Property Type X Quarter						Included
Market X Quarter						Included
Observations	24,157	24,157	24,157	24,157	24,157	24,157
Adj. R-squared	0.363	0.409	0.534	0.576	0.599	0.634

Table 6: Loan Spreads and Foreign Investment

This table reports the results from the regression of loan spreads on a firm's exposure to increased foreign investment. *High Collateral Discount* is a dummy variable that equals one if the expected collateral discount is in the top 20th percentile. *Exposure to High-Risk Countries* is defined as the percentage of the value of a firm's real estate portfolio that is exposed to abnormal investment from countries with increased policy uncertainty. In order to detect property types and markets with abnormal investment, we first estimate the residuals from the following regression

$$Ln(Total\ Investment\ from\ High\text{-}Risk\ Countries_{i,j,t} + 1) =$$
$$Ln(Total\ Foreign\ Investment_{i,j,t} + 1) + Region \times Year\ FE + Market\ FE_{i,j} + \varepsilon_{i,j,t}$$

where i denotes the property type, j is the RCA market that the property is located in, and t denotes the year of investment. A property is assumed to be exposed to abnormal foreign investment from high-risk countries if the predicted residual for its type and market is in the top 10% of the distribution. We assume that a country is highly risky if the policy uncertainty index for that country is in the top quintile of its time-series distribution. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Loan Spread					
	Asset Redeployability			Number of Potential Buyers		
	(1)	(2)	(3)	(4)	(5)	(6)
Exposure to High-Risk Countries$_t$	-31.618**	-17.156	-8.962	-32.524**	-17.455	-9.237
	(-2.402)	(-1.203)	(-0.583)	(-2.428)	(-1.232)	(-0.576)
X High Collateral Discount$_t$		-44.096**	-40.769**		-42.242*	-42.696*
		(-2.131)	(-1.975)		(-1.749)	(-1.828)
High Collateral Discount$_t$		19.816**	19.299**		21.516***	21.146***
		(2.340)	(2.277)		(2.852)	(2.823)
Secured Dummy$_t$=Yes	73.736***	74.075***	77.593***	73.833***	72.492***	76.097***
	(8.218)	(8.287)	(8.046)	(8.264)	(8.130)	(7.939)
X Exposure to High-Risk Countries$_t$			-31.822			-33.263*
			(-1.645)			(-1.706)
Secured Dummy$_t$=Missing	3.878	3.890	4.279	3.905	3.396	3.313
	(0.826)	(0.826)	(0.788)	(0.832)	(0.720)	(0.615)
X Exposure to High-Risk Countries$_t$			-0.379			4.733
			(-0.019)			(0.237)
Ind.-Adj. Leverage$_{t-1}$	72.419***	99.827***	97.865***	72.505***	104.408***	102.325***
	(3.811)	(4.678)	(4.548)	(3.806)	(5.264)	(5.132)
X Exposure to High-Risk Countries$_t$		-124.780***	-105.649**		-129.768***	-112.040**
		(-2.735)	(-2.216)		(-2.856)	(-2.404)
Ln(Portfolio Value$_t$)	1.226	1.721	1.414	1.441	1.968	1.613
	(0.425)	(0.592)	(0.480)	(0.499)	(0.674)	(0.548)
Loan Controls	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Industry FE	YES	YES	YES	YES	YES	YES
Adjusted R-squared	0.675	0.677	0.677	0.675	0.678	0.678
Observations	1,193	1,193	1,193	1,193	1,193	1,193

Appendix

Table A1: Variable Definitions

This table presents the definitions of the variables used in this paper. Panel A includes the definitions of company-level variables obtained from Compustat Annual Files. Panel B lists the definitions of property characteristics obtained from RCA Database. All company-level variables are measured at least one month and at most eleven months before the transaction date, depending on the firm's fiscal year end month. For instance, if the property was sold in December and the company's fiscal year ends in November, then the company controls are measured in that November, whereas if the property was sold in January and the company's fiscal year ends in February, then the company controls are measured in February prior to the sale.

Panel A: Company Variables

Variable	Definition	Compustat Item Name
ROA	Operating Income / Assets	**oibdp / at**
Tangibility	Net PPE / Assets	**ppent / at**
MVA	Market Value of Assets	**prccf** × **cshpri** + **(dltt** + **dlc)** + **pstkl**
Market-to-book	MVA / Total Book Assets	**(prccf** × **cshpri** + **(dltt** + **dlc)** + **pstkl) / at**
Ln(Assets)	Ln(Total Book Assets)	**ln(at)**
Total Debt	Short-Term Debt + Long-Term Debt	**dltt + dlc**
Leverage	Total Debt / Total Book Assets	**(dltt + dlc) / at**
Ind.-Adj. Leverage	Leverage - Industry Median	
Interest Coverage	Operating Income / Interest Expense	**oibdp / xint**
Herfindahl Index	Sum of squared market shares of all firms in the same three-digit SIC industry	

Panel B: Property Variables

Variable	Definition
Unit Property Price	Ln[(price / square feet) + 1]
Size	Ln(square feet)
Age	Six categories: $\leq$10, between 11 and 20, 21 and 30, 31 and 40, 41 and 50, and above 50
Renovated Dummy	= 1 if there is non-missing data for the year that the property was renovated or expanded
Portfolio Dummy	= 1 if the sale is part of a portfolio transaction
CBD Dummy	= 1 if the property is located in a central business district or in the downtown of a city
Occupancy Rate	The floor space or units occupied by tenants as a percentage of the total leasable area of the building at the time of a sale
Flex	Denotes a property that is flexible in that it can be used for industrial or office activities
Average Unit Property Price	Natural logarithm of average price per square feet for property types Apartment, Industrial, Office and Retail

Table A2: Alternative Distress Proxies

This table reports the estimation results for the specification in column (4) of Table 2, Panel B using alternative distress proxies. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Panel A: Unit Property Price				
	(1)	(2)	(3)	(4)	(5)
Industry-Adjusted Leverage$_{t-1}$	-0.551***				
	(-3.393)				
Leverage$_{t-1}$		-0.659***			
		(-4.638)			
Medium Leverage Dummy$_{t-1}$			-0.181**		
			(-2.428)		
High Leverage Dummy$_{t-1}$			-0.229***		
			(-3.270)		
High Leverage & Low Current Asset Dummy$_{t-1}$				-0.155**	
				(-2.310)	
Interest Coverage Ratio$_{t-1}$					0.009***
					(3.075)
Adjusted R-squared	0.615	0.617	0.614	0.601	0.606
Observations	2,274	2,274	2,274	2,175	2,218
Property Controls	Yes	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes
Observations	Yes	Yes	Yes	Yes	Yes

	Panel B: Residual Price				
	(1)	(2)	(3)	(4)	(5)
Industry-Adjusted Leverage$_{t-1}$	-0.506***				
	(-2.705)				
Leverage$_{t-1}$		-0.572***			
		(-3.648)			
Medium Leverage Dummy$_{t-1}$			-0.195**		
			(-2.128)		
High Leverage Dummy$_{t-1}$			-0.187**		
			(-2.322)		
High Leverage & Low Current Asset Dummy$_{t-1}$				-0.166**	
				(-2.180)	
Interest Coverage Ratio$_{t-1}$					0.009***
					(2.840)
Adjusted R-squared	0.078	0.080	0.077	0.074	0.093
Observations	2,274	2,274	2,274	2,175	2,218
Firm Controls	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes

Table A3: Alternative Specifications

This table reports the results from the robustness tests of the baseline model in column (4) of Table 2, Panel B for different specifications and subsamples. Panel A reports the estimation results for the unit price regressions and Panel B for residual price regressions. Column (1) estimates the baseline model for the subsample before 2007. Column (2) includes two-digit SIC industry fixed effects. The sample in column (3) is restricted to sales that are not part of a portfolio transaction. Column (4) restricts the sample to properties that are located in a different state than the seller's headquarters. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Unit Property Price			
Panel A	(1)	(2)	(3)	(4)
Medium Ind.-Adj. Leverage Dummy$_{t-1}$	-0.192***	-0.121**	-0.190***	-0.234**
	(-2.913)	(-2.486)	(-3.199)	(-2.488)
High Ind.-Adj. Leverage Dummy$_{t-1}$	-0.208**	-0.165***	-0.276***	-0.341***
	(-2.336)	(-3.118)	(-3.738)	(-3.208)
Adjusted R-squared	0.520	0.646	0.645	0.618
Observations	1,097	2,274	1,515	1,785
Industry-Adjusted Leverage$_{t-1}$	-0.457**	-0.392***	-0.650***	-0.705***
	(-2.594)	(-3.296)	(-4.559)	(-3.390)
Adjusted R-squared	0.520	0.647	0.645	0.615
Observations	1,097	2,274	1,515	1,785
High Leverage & Low Current Asset Dummy$_{t-1}$	-0.197***	-0.099**	-0.170***	-0.188**
	(-3.244)	(-2.512)	(-2.745)	(-2.200)
Adjusted R-squared	0.509	0.638	0.627	0.598
Observations	1,057	2,175	1,454	1,701
Interest Coverage Ratio$_{t-1}$	0.006**	0.004**	0.010***	0.011***
	(2.236)	(2.356)	(3.756)	(3.019)
Adjusted R-squared	0.505	0.634	0.627	0.605
Observations	1,067	2,218	1,461	1,741
Property Controls	Yes	Yes	Yes	Yes
Firm Controls	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes
Industry FE		Yes		

Table A3 Cont.: Alternative Specifications

Panel B	Residual Price (1)	(2)	(3)	(4)
Medium Ind.-Adj. Leverage Dummy$_{t-1}$	-0.163***	-0.096**	-0.189***	-0.206*
	(-2.732)	(-2.042)	(-3.006)	(-1.919)
High Ind.-Adj. Leverage Dummy$_{t-1}$	-0.171*	-0.135***	-0.280***	-0.326**
	(-1.931)	(-2.653)	(-3.126)	(-2.499)
Adjusted R-squared	0.043	0.169	0.082	0.085
Observations	1,097	2,274	1,515	1,785
Industry-Adjusted Leverage$_{t-1}$	-0.388**	-0.320***	-0.640***	-0.644**
	(-2.291)	(-2.750)	(-3.704)	(-2.503)
Adjusted R-squared	0.042	0.169	0.080	0.076
Observations	1,097	2,274	1,515	1,785
High Leverage & Low Current Asset Dummy	-0.206***	-0.077**	-0.188**	-0.206**
	(-3.277)	(-2.035)	(-2.567)	(-1.983)
Adjusted R-squared	0.043	0.171	0.065	0.072
Observations	1,057	2,175	1,454	1,701
Interest Coverage Ratio$_{t-1}$	0.006**	0.004**	0.010***	0.012***
	(2.316)	(2.208)	(3.139)	(2.716)
Adjusted R-squared	0.050	0.162	0.088	0.092
Observations	1,067	2,218	1,461	1,741
Firm Controls	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes
Industry FE		Yes		

Table A4: Hedonic Model and Firm Distress

Columns (1)-(2) report the estimation results of the hedonic model where we regress *Unit Property Price* on various observable property characteristics. In column (2), we include property characteristics as well as their interactions with property type indicators. The reported coefficient estimates are for the reference property type (*Apartment*). Columns (3)-(6) report the coefficient estimates from the regression of the residuals estimated in column (2) on leverage tercile dummies and firm characteristic. In columns (1) and (2), standard errors are clustered at the RCA Market level and in columns (3)-(6) at the firm level.

	Unit Property Price (First Stage)		Residual Price (Second Stage)			
	(1)	(2)	(3)	(4)	(5)	(6)
Property Size	-0.181***	-0.047**				
	(-15.807)	(-2.101)				
Age Group 1	-0.241***	-0.291***				
	(-21.104)	(-13.965)				
Age Group 2	-0.401***	-0.472***				
	(-24.044)	(-14.274)				
Age Group 3	-0.476***	-0.547***				
	(-19.391)	(-13.576)				
Age Group 4	-0.487***	-0.458***				
	(-15.381)	(-6.471)				
Age Group 5	-0.469***	-0.568***				
	(-15.125)	(-9.418)				
Renovated	0.132***	0.087***				
	(9.072)	(2.976)				
Portfolio	0.002	-0.032				
	(0.113)	(-1.204)				
Central Business District	0.373***	0.347***				
	(4.798)	(4.096)				
Medium Ind.-Adj. Leverage Dummy$_{t-1}$			-0.192***	-0.180**	-0.184**	-0.165**
			(-2.658)	(-2.268)	(-2.398)	(-2.122)
High Ind.-Adj. Leverage Dummy$_{t-1}$			-0.224***	-0.267***	-0.211**	-0.250**
			(-2.778)	(-2.941)	(-2.374)	(-2.550)
ROA$_{t-1}$			-0.482*	-0.422	-0.559*	-0.374
			-0.482*	-0.422	-0.559*	-0.374
Tangibility$_{t-1}$			(-1.882)	(-1.318)	(-1.777)	(-1.078)
			-0.029	0.011	-0.070	-0.031
Market-to-book$_{t-1}$			(-0.221)	(0.070)	(-0.434)	(-0.174)
			0.041	0.022	0.047*	0.029
Ln(Assets$_{t-1}$)			(1.616)	(0.844)	(1.842)	(1.085)
			-0.022	-0.019	-0.018	-0.021
			(-1.428)	(-1.171)	(-1.016)	(-1.286)
Adjusted R-squared	0.565	0.587	0.034	0.052	0.073	0.084
Observations	30,310	30,310	2,274	2,274	2,274	2,274
Quarter FE	Yes	Yes		Yes		Yes
Year X Market FE	Yes	Yes				
Property Type Interactions		Yes				
Market FE					Yes	Yes

Table A5: Residual Prices and Quality Proxies

This table reports results from the regression of residual price on each of the quality proxies, namely *Buyer Purpose*, *Tenancy Status* and *Occupancy Rate*, and our distress proxies. *Buyer Purpose* can be *Investment, Occupancy, Redevelopment* or *Renovation*. *Tenancy Status* is the occupancy type at time of sale, which can be *Multi-Tenant*, *Single Tenant* or *Vacant*. *Occupancy Rate* is defined as the floor space or units occupied by tenants as a percentage of the total leasable area of the building at the time of a sale. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

	Residual Price					
Panel A.1	(1)	(2)	(3)	(4)	(5)	(6)
Redevelopment or Renovation	-0.196***			-0.181***		
	(-3.382)			(-3.153)		
Vacant		-0.354***			-0.335***	
		(-5.614)			(-6.080)	
Occupancy Rate			0.289***			0.284***
			(5.140)			(5.281)
Medium Ind.-Adj. Leverage Dummy				-0.161**	-0.159*	-0.164**
				(-2.093)	(-1.827)	(-2.000)
High Ind.-Adj. Leverage Dummy				-0.239**	-0.225**	-0.249**
				(-2.436)	(-2.173)	(-2.500)
Adjusted R-squared	0.073	0.124	0.100	0.090	0.138	0.117
Observations	2,268	1,949	1,649	2,268	1,949	1,649
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes

Panel A.2	(1)	(2)	(3)	(4)	(5)	(6)
Redevelopment or Renovation	-0.181***			-0.180***		
	(-3.053)			(-3.459)		
Vacant		-0.356***			-0.303***	
		(-6.058)			(-5.972)	
Occupancy Rate			0.293***			0.248***
			(5.366)			(4.671)
High Leverage & Low Current Asset Dummy	-0.157**	-0.149*	-0.171**			
	(-2.064)	(-1.859)	(-2.073)			
Interest Coverage Ratio				0.009***	0.008**	0.007*
				(2.801)	(2.351)	(1.941)
Adjusted R-squared	0.080	0.135	0.115	0.099	0.139	0.108
Observations	2,169	1,884	1,587	2,212	1,904	1,605
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes

Table A6: Asset Redeployability and Potential Buyers (Residual Prices)

This table reports the results from the regression of residual prices on firm distress with asset redeployability interactions (Panel A) and with the number of potential buyer interactions (Panal B). *Office* takes one for offices and for properties that can be used for both industrial or office activities. The number of potential buyers is measured by one of the following three variables: (i) *1-Herfindahl Index* is the Herfindahl Index of sales based on the firm's three-digit SIC industry, (ii) *10-K Count* is the number of companies in the seller firm's three-digit SIC industry who mentions the state of the property in its 10-Ks at least once during the year preceding the transaction (Garcia and Norli, 2012), (iii) *Headquarter count* is the number of companies in the seller firm's three-digit SIC industry whose headquarters are located in the same state as the property. Standard errors are clustered at the firm level. Statistical significance at the 10%, 5% and 1% levels are denoted by *, ** and ***, respectively.

Panel A: Asset Redeployability

	Residual Price			
	(1)	(2)	(3)	(4)
Medium Ind.-Adj. Leverage Dummy$_{t-1}$	-0.186*			
	(-1.786)			
X Office	0.100			
	(0.841)			
High Ind.-Adj. Leverage Dummy$_{t-1}$	-0.349***			
	(-2.762)			
X Office	0.293**			
	(2.140)			
Industry-Adjusted Leverage$_{t-1}$		-0.663***		
		(-2.730)		
X Office		0.472*		
		(1.693)		
Interest Coverage Ratio$_{t-1}$			0.012***	
			(3.177)	
X Office			-0.011***	
			(-2.653)	
High Leverage & Low Current Asset Dummy				-0.245**
				(-2.401)
X Office				0.226**
				(1.983)
Adjusted R-squared	0.108	0.101	0.120	0.099
Observations	2,274	2,274	2,218	2,175
Firm Controls	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes

Table A6 Cont.: Asset Redeployability and Potential Buyers (Residual Prices)

Panel B: Potential Buyers

	Residual Price								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1-Herfindahl Index	0.582***	0.272*	0.467***						
	(3.871)	(1.700)	(3.791)						
10-K Count				0.042***	0.022	0.044***			
				(2.702)	(1.014)	(2.814)			
Headquarter Count							0.049**	0.013	0.053***
							(2.565)	(0.469)	(2.767)
Medium Ind.-Adj. Leverage Dummy		-0.229			-0.181*			-0.189**	
		(-1.507)			(-1.690)			(-1.970)	
X Number of Buyers		0.081			0.010			0.024	
		(0.442)			(0.328)			(0.665)	
High Ind.-Adj. Leverage Dummy		-0.628***			-0.441***			-0.397***	
		(-3.302)			(-3.348)			(-3.400)	
X Number of Buyers		0.556**			0.082**			0.106***	
		(2.555)			(2.485)			(2.906)	
Industry-Adjusted Leverage$_{t-1}$			-1.300**			-0.857***			-0.733***
			(-2.218)			(-3.212)			(-3.043)
X Number of Buyers			1.056			0.139*			0.131
			(1.575)			(1.856)			(1.635)
Adjusted R-squared	0.090	0.109	0.103	0.069	0.095	0.088	0.069	0.097	0.087
Observations	2,274	2,274	2,274	2,274	2,274	2,274	2,274	2,274	2,274
Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Quarter FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Market FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes